Attraction accountability

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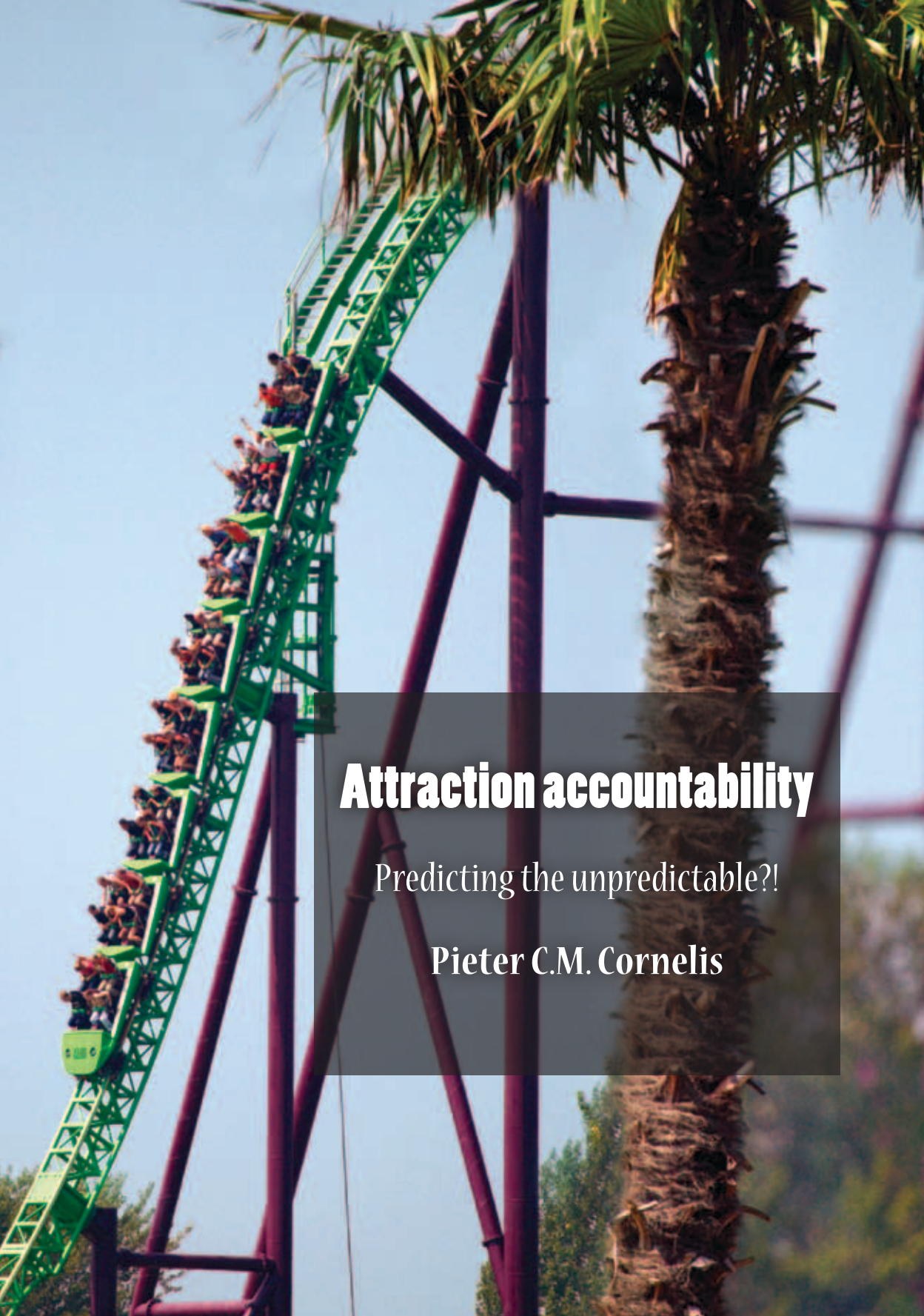

Attraction accountability

Predicting the unpredictable?!

Pieter C.M. Cornelis

Attraction accountability

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Colofon

Attraction accountability:
Predicting the unpredictable?!

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Attraction accountability

Predicting the unpredictable?!

PROEFSCHRIFT

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in het openbaar te verdedigen
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Promotiecommissie

Promotores

Prof. dr. ir. J.T. Mommaas
Prof. dr. S. Anton Clavé

Overige leden

Prof. dr. G.W. Richards
Prof. dr. T.B.C. Poiesz
Prof. dr. A.P. Russo
Dr. ir. H.J.J. van der Poel

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Preface and acknowledgements

In januari 1997 ben ik samen met mijn vrouw Thera op vakantie geweest in Florida. Het was voor mij de eerste keer dat ik in de Disneyparken Magic Kingdom en Epcot kwam. Ik herinner me nog levendig dat ik een gelukzalig gevoel van onbezorgdheid had; lekker genietend van de geïdealiseerde Disney-wereld. In Epcot bezochten we onder meer het land-paviljon waar de Lion King-film 'circle of life' werd vertoond. Het was een combinatie van liefelijke Disney-taferelen, vermengd met realistische beelden over de vervuiling van de wereld. Ik zag hoe kleine kinderen werden aangegrepen door dit sterk staaltje Disney-educatie en wilde zelf na afloop de zaal eigenlijk niet verlaten. Toen ik buiten stond besloot ik dat dit mijn toekomst zou worden. Ooit zou ik in deze wereld werken en zou ik een onderdeel zijn van 'the happiest place on earth'.

Vanochtend kneep ik mezelf eventjes in mijn arm. Ik zit momenteel in Epcot op een bankje aan het water in mijn inmiddels favoriete United Kingdom paviljoen. Het is half november, 29 graden, en er zijn geen wolkjes te bekennen. Gisteren heb ik een presentatie gegeven voor de branchevereniging IAAPA over de resultaten van mijn onderzoek en wederom vele interessante en bovenal aardige mensen uit de branche ontmoet. En op dit moment schrijf ik de laatste woorden van mijn proefschrift over het belang en de invloed van investeren voor European theme parks. Terwijl ik me dit realiseer branden de tranen van blijdschap in mijn ogen. Ik voel me een gezegend mens dat ik dit mag meemaken en wil op deze plaats mijn oprechte dank uit spreken aan iedereen die dit mogelijk heeft gemaakt.

Op de eerste plaats wil ik daarvoor natuurlijk mijn pa en ma danken. Met jullie onvoorwaardelijke liefde, steun en goede bedoelingen hebben jullie me een basis gegeven waarop ik heb kunnen groeien tot wie ik ben en wil zijn. Jullie voorbeeldgedrag heeft me al vroegtijdig geleerd te begrijpen wat echt belangrijk is in het leven. Dank jullie voor alles. Ik hou ontzettend veel van jullie en ben blij dat ik middels dit voorwoord de kans heb om dat te vereeuwigen!

Op de tweede plaats dank ik Ger Pepels (directeur NHTV AfL) die het voor mij mogelijk heeft gemaakt mijn droom te verwezenlijken. Ik waardeer je inspanningen en betrokkenheid bij het proces bijzonder en hoop nog lange tijd in jouw team actief te mogen zijn. Tevens spreek ik mijn dank uit aan alle collega's en studenten van de NHTV en Tilburg University die de afgelopen jaren interesse hebben getoond in mijn onderzoek. Ik waardeer het dat vele van jullie mijn enthousiasme over "zoiets triviaals als pretparken" hebben geduld. Een bijzonder woord van dank gaat uit naar Arend, Guido, Klaus, Moniek, Sandra en Wilco die ieder op hun eigen manier een belangrijke rol in mijn NHTV-carrière hebben vervuld. Een extra woord van dank gaat uit naar (oud-)collega's Wim Janssen, Margo Rooijackers en Henk Senster. Dank voor jullie steun en vertrouwen.

Of course this dissertation would not have been possible without the patient guidance and perfect coaching of my two supervisors. I was happy as a child the moment Salvador Anton Clave agreed to become my supervisor when I approached him about three years ago. Your thorough knowledge of the theme park industry, academic approach of it and friendly personality have turned every business trip to Tarragona, Girona, Reus, Barcelona, Vila Seca and Salou into a short break holiday. I will certainly miss our conversations, the wine and excellent food. Thanks for this and your involvement, dedication, feedback and inspiration. I hope I have met your expectations and standards.

Actually, I have the same words of appreciation for Hans Mommaas. I am very glad that you have been my supervisor. From the very beginning you made clear what the possibilities, challenges and pitfalls of my research were, and with a gentle yet compelling hand you have ensured that I did not derail in my methodological bias. Although I never really considered my trips to Tilburg as a vacation I have always been looking forward to them. I knew that your relativistic and abstract words brought me one step closer to achieving my goals, every time. Many thanks for this and the very pleasant way you supervised me.

From an academic perspective I am indebted to Greg Richards, Hugo van der Poel, Rutger van Oest, Harald van Heerde, Rene Backx, the members of the reading committee and the anonymous referents that gave feedback on my papers. You have each in your own way played a very important part in achieving my PhD. Without your valuable feedback and advice this dissertation would never have appeared in its present form. Many thanks for your assistance. A special word of appreciation goes to Gerald Zaltman and Wilfred Achthoven who made me familiar with ZMET, trained me in this method and allowed me to use it for my dissertation. Thank you very much for this great opportunity.

I would also like to thank the contacts of all participating parks for their trust in me and my research. I know that, initially, many of you had to deal with some organizational resistance to deliver confidential data, but I am very glad to know that this trust is not harmed. The results of the research appear to have given some interesting insights to all of you in order to increase the chances on a successful new investment in the future. I am very happy and relieved with this feedback. I would also like to thank all other parks that participated in my research. Over the last three years, I have had the privilege to meet many friendly and interesting people from our beautiful industry and it is impossible to thank them all in person. Nonetheless, I would really like to thank the following people in particular for their interest, sympathy, coaching, feedback, appreciation, friendly words and many pleasant moments: all members of the IAAPA European Education Committee (Mikael Ahlerup, Reinoud van Assendelft de Coningh, Mike Brown, Paul Chatelot, Gianni Chiari, Ulla Harrison, Michael Kreft von Byern, Lars Nielsen, Marcel Schonenberg), the IAAPA staff (Andreas Veilstrup Andersen, Eamon Connor, John Henderson, Andrea Kolar, Karen Staley and Jakob Wahl), Dutch industry peers (Paul Beck, Frankwin van Beers, Henric Bemboom, Carin van Berkel, Coen Bertens, Jeff Bertus, Peter van Bilsen, Bart de Boer, Erik van den Brand, Pieter van den Broek, Frank Cornelissen, Wouter Dekker, Bart Dohmen, Michel den Dulk, Marie Jose Ernst, Marten Foppen, Jean Gelissen, Henk Groenen, Liesbeth den Hollander, Jeroen Holman, Stefan Holtman, Marc Hoyng, Cees Kikstra, Roland Kleve, Hans van Leeuwen, Lex Lemmens, Caroline Maessen, Jeroen Nijpels, Roland van Pelt, Jan Maarten de Raad, Jan Reuvers, Sepp Rickli, Marjolein van de Stolpe, Simeon van Tellingen, Joep Thonissen, Ellen Verburg, Frank Verkoijen, Ton Vermeulen, Jose de Vries, Walter Wildhagen, Mark Wijman, Richard Wijnveldt, Ronald van der Zijl) and last but not least all industry peers from abroad (Annabel Altmann, Alison Armor, Martin Barratt, Betim Budzaka, Duncan Campbell, Neil Corbett, David Escudero Cuesta, Danny DeTroch, Duncan Dickson, Angel Arenas Garcia, Gene Geffers, Jorgen Jensen, Soren Kragelund, Martin Lewison, Lars Liebst, Michael Mack, Adrian Mahon, Ady Milman, Lesley Morisetti, Gemma Novat, Bret Pfost, Harrison “Buzz” Price, Owen Ralph, Bob Rogers, Tim Ruedy, Nidal Sadeq, Tony Sefton, Mikkel Sonne, Erwin Taets, Alain Trouve, David Vatcher, Roliena Visser, Liesbeth van Wachbeke, Mats Wedin, Dorothe Weinkouff Barsoe, Carl-Otto Wenzel, Tom Wolber). I know that just a simple and plain reference in this preface is not enough to express my sincere thanks, but I hope and expect that my gratitute for everything you did and meant for me has already come through. I hope this dissertation contributes to the further growth and prosperity of the industry I have fallen in love with. Your critical feedback on the final version of this dissertation will be highly appreciated.

Hubert, Lusanne, Mara, Jilne, Mirjam, Han, Milan, Louck, Koos, Corrie, Jeanette and Monique: dank voor jullie oprechte interesse en steun in de afgelopen jaren. Het gaf me een goed gevoel te weten dat jullie er waren voor mijn thuisfront als ik weer eens op reis was. Ik hoop vanaf komend jaar weer even veel tijd voor jullie te hebben als jullie de afgelopen jaren voor ons hebben gehad. Woorden schieten te kort om mijn dank uit te drukken, maar ik hoop dat het overkomt als ik zeg dat ik jullie enorm lief heb.

Peter, Irma, Jaap, Linda, Peter, Esther, Wim, Claudie, Harold, Maureen, Marco, Sylvia: dank voor jullie vriendschap. Het leven zou de afgelopen 25 jaar een stuk minder aangenaam geweest zijn zonder jullie. Ik ben blij dat jullie mijn adviezen serieus nemen en regelmatig een pretpark bezoeken, en allemaal overwegen om volgend jaar mee naar Orlando te gaan....

Het allerlaatste woord is uiteraard bestemd voor de twee droomvrouwen in mijn leven, mijn jeugdliefde en vrouw Thera en onze prachtdochter Ilsa. Ik zit momenteel in Epcot “the happiest place on earth”, maar voor mij is er maar een plaats op aarde waarvoor dat echt opgaat. Morgen ben ik weer thuis :) xp

Pieter Cornelis
17 November 2010

Chapter 1 *Introduction*

When the former CEO of the Efteling, Ronald van der Zijl, came to me in May 2005 with the request to investigate the influence of the Efteling's newest attraction on visitor numbers at the park, I had no idea that this project would end up as the dissertation now before you. The first reason was that I could hardly believe that so little was known about the effects of investing in new attractions. Every year, hundreds of millions are invested in our industry in Europe alone (ERA/AECOM, 2009). In America and Asia the investments will doubtless be even higher, and therefore it was incomprehensible to me that research had never been done on the influence of adding new attractions to a theme park. However, it soon became clear that Van der Zijl was indeed correct. An extensive survey of available literature turned up only two very limited reports (Hogley, Chen & He, 2005; Kaak, 1992) and enquiry in the industry also yielded no relevant studies or sources. The Flying Dutchman was going to cost at least 20 million euros and that sum was considerably higher than the profits of the entire Efteling concern at that time (Efteling 2005, 2006). In the past, the Efteling had made enormous investments without apparently knowing exactly what the effects would be, and nevertheless the park is known as one of the most financially sound in the industry. So evidently you can go pretty far if you understand the signs of the times. But as Van der Zijl himself always said, 'Results from the past offer no guarantees for the future'. What if serendipity leaves the company, or gut feeling is no longer successful? The company can then no longer rely on the 'creative genius' and has to find other ways to deal with creativity, innovation and investments.

And so it was time to do some serious research into the influence of investments in theme parks. This research turned out to be so interesting and challenging that I decided to make it the subject of a dissertation. In this way I had the possibility to work on the research for a longer time with more and other European theme parks involved, and I could come up with better and stronger results. I had already presented the results of my research on the Flying Dutchman to the directors of the Efteling and was of the opinion that the subject would bear more examination in depth and breadth. What was true for the Efteling, in my view, was not necessarily the case for other parks. In fact, I even thought that what was true of the Efteling by definition would not be true of other parks. The uniqueness of the Efteling as a theme park is so considerable (Van Assendelft de Coningh, 1995) that any comparison with other parks will fail on countless points. And thus, full of enthusiasm and renewed ambition, I signed a contract with NHTV Breda University of Applied Sciences where I was offered the opportunity to work on this research project two days a week for three years. Of course I had already allowed for the fact that I would end up working for four years on my dissertation, more than five days a week. Hobbies are certainly allowed to claim some time – and money – so I did not see a problem. I spent the first year of my research convincing other parks to participate in my research. In hindsight this was one of the hardest parts of my study. Parks are extremely reticent about supplying confidential information, but at the same time, as will be clear from this dissertation, we really needed information from multiple parks in order to present publicly accessible results that can be generalised.

Back when I was researching the Flying Dutchman, I contacted colleagues from the economics faculty at the Tilburg University. Professor van Heerde said that he could offer a brilliant student (René Backx) if he could use the results of the study for an academic publication. He had also found that this was an undercultivated field of research. We decided to approve this request under the condition that the results in the publication would be disguised. That is why in 2010 there were suddenly articles

appearing in various academic journals about the impact of new attractions on theme parks. One of these articles was very econometric and science-oriented, and could mainly be applied to other product categories where there are bundles of products (Van Oest, Van Heerde & DeKimpe, 2010). The other articles were written more for the theme park industry and in accord with the aim of my dissertation (Cornelis 2010a, 2010b). As I wrote in the first draft of my research proposal in August 2007 (Cornelis, 2007): "My dissertation does not need to garner any praise in scholarly circles with an award for outstanding academic achievement, but it would be most gratifying if the IAAPA (International Association of Amusement Parks and Attractions) expressed itself approvingly over it and thereby opened doors to the international theme park market" (p.17). Whether this was successful will be evident in the epilogue of this dissertation.

The study for the Efteling really came a little late in the day. The original purpose of the study about the Flying Dutchman was to get an idea of the possible effect of an investment of this scale on the number of extra visitors it would bring to the park, and thus to determine whether it would be cost-effective to make such an investment. The study was also supposed to supply information about the content of the investment. Would it be better to spend 20 million euros on a roller coaster, a water attraction, a dark ride or perhaps a combination of these? How strongly would the attraction need to be themed, how much thrill would it need to have, etc.? The study ended up taking more than seven months, and an organisation like the Efteling cannot stand still that long. Countless decisions had already been made, it had already been announced to the public that the newest attraction at the Efteling would open on 1 April 2006, and there was no turning back, even if the results of the study had recommended such a course. The theming had already been worked out in detail by designer Karel Willemen and even the technical drawings were nearly ready. Although the results of the study for the Flying Dutchman came too late, the research at least shed light on the effect of the Efteling's existing attractions, and thus supplied some information for future investment possibilities. This outcome was a bit frustrating for me in the beginning but later I realised that this would be the maximum outcome of this dissertation. I will get back to this insight in the next section and the final chapter of this dissertation. For instance, the study showed how many new visits are made as a result of each newly added attraction at the Efteling. What is not known are the reasons behind these numbers. Does PandaVision score so few extra visits because it is a 3D/4D show, or is there some other reason? For a better insight into the effects of new attractions, additional research is needed. In this dissertation I will show and discuss, among other things, how such additional research can be carried out in a systematic and structured way.

1.1. Singularity of cultural industries

As indicated in the introduction, the reason for my quest to determine the effectiveness of investments in new attractions was the uncertainty in the industry regarding the effects of these significant investments. In view of the enormous financial interests and risks, it is understandable that the industry would want an answer to the question of where investment would be most effective, and how frequently such investments should be made. In other words, what is the key to success? It is a question relevant to the creation and/or performance of all stories, songs, images, poems, jokes, games, TV formats and programs and so on. However, given the creative and contextual character of the cultural industries, it may well be wondered whether a clear and generally applicable answer can be found. The cultural industries are such a risky business because there is a natural tension between creativity and predictability (Hesmondhalgh, 2007; Neuman, 1991; Wolf, 1999). The risk derives from the fact that audiences use cultural commodities in highly volatile and unpredictable ways, often in order

to express that they are different from other people (Garnham, 1990 in Hesmondhalgh, 2007). As a result, fashionable performers or styles, even if heavily marketed, can suddenly come to be perceived as outmoded and, equally, other texts can become unexpectedly successful (Hesmondhalgh, 2007). Many texts fail, even those that companies expect to succeed. For every blockbuster, there are hundred near-misses, misses and outright failures (Lieberman & Esgate, 2002).

The upshot of these processes is that companies in the cultural industry keep a much tighter grip on the circulation of texts than they do on their production (Hesmondhalgh, 2007). And that in itself could be the reason it remains a risky business. The industry is, perhaps, kept in the state of a self-fulfilling prophecy. Attention is shifted from the production of content, which is difficult to control, to its distribution, which is easier to control. The way in which the Efteling has dealt with content development and distribution over the past four years is a good example of this. I wonder whether the format of the fairy tale tree (where many fairy-tale forest-dwellers experience all kinds of adventures together) fits very well with the mission of the brand, which is as guardian of the fairy tale. The distribution of the fairy tale tree, however, is limitless and takes the form of biscuits, sweets, desserts, hand towels, caps, umbrellas, DVDs, mugs, books, keychains and so forth. In a short time the business has established an impressive distribution. It looks as if the same thing will happen with Pardoes. Over the years, this character has been through many changes in appearance and story line, but appears to have found a destination in an attraction costing upwards of 40 million euros which will open in 2013. For support and spinoff, this character will also get an enormous boost in the area of distribution by means of TV series, comics, books, DVDs, musicals, games and so on. It's a risky business, but these examples show that it is not simply a wild guess. The tension between creativity and predictability appears to be accommodated by de Efteling, and the cultural industries in general, by using controllable and proven formatting strategies such as genre thinking, using stars, serials (Hesmondhalgh, 2007; Ryan 1992) and theming, and keeping a much tighter grip on the circulation of text rather than on production of it.

My aim with this dissertation is to add one or several proven techniques to the arsenal of risk-reducing possibilities available to the industry. Although the theme park industry is not explicitly mentioned as an example of the cultural industries I do not believe it is possible to find a magic formula for success in this industry either. It would be an undervaluation of the genius of the real imagineers in our industry, as well as an underestimation of the contextual aspect in which parks operate. I hope that it will be possible to arrive at guidelines and tools in this academically uncharted territory of investment in theme parks to reduce the chance of flop investments and increase the chance of winning investments; maybe resulting in a slight shift from content circulation strategies to content production strategies. As early as 1957, Carter and Williams identified the following factors underlying successful product development: good people at all levels, a willingness to take on new knowledge and sharing of knowledge, and cost consciousness (Von Stamm, 2003). This dissertation is primarily about cost consciousness and aims to generate knowledge that can be used by good people at all levels of theme parks in order to arrive at better investment decisions with regard to new attractions. Risk cannot be removed from any business decision, but in this way we can hopefully reduce that risk.

1.2. Possibilities of accountability

In the preceding section I expressed certain doubts about the possibility of mapping the types of effects aimed at in this dissertation for cultural goods in the same way as for other goods. Nevertheless, I believe that we cannot escape accountability in the cultural industries in general and especially not in the theme park industry. The investment levels for new attractions are very high and banks are seriously reserved to finance the risks, so we have to gain better insights into the return of our investments. Accountability drives many management decisions which were previously made less formally. It requires that the activity that is studied must produce results which are more or less predictable; the costs to achieve these results are agreed, as are the benefits which will flow from them. These effects must be reported on after the event and they should be compared with benchmarks. One judges the effects against one's business and management objectives, both in the marketplace and on one's budget. The findings are used to plan future steps in what is a cyclical and learning process (Broadbent, 1997). I believe that investments in new attractions have too rarely been accountable in this sense. At present, developing new attractions usually takes place based on subjective, intuitive and often random presuppositions about the possible responses from visitors. Research into the effects of attractions remains therefore insufficient and fragmentary by nature, which will not provide adequate results in the long-term (Rouse, 2003; Swarbrooke, 2001). "Without a systematic approach, experience marketing can only be left in the hands of creative and intuitive designers and managers who, though talented and well-intended, may not see the customer experience in its entirety and complexity" (Le Bel, 2005, p.448). This statement may outrage some theme park managers and imagineers who claim their new attractions 'work'. They mean they have detected, even measured, the appreciation of the new attraction. 'Kids like it, last week the waiting time for this new attraction was more than two hours and 90% of the visitors want to do the ride again'. From such effects, which are genuine and valuable, they claim their new attractions are 'effective': this can be a weasel word, sliding easily into 'worth it' (Broadbent, 1997). I believe that in the past 30 years, the theme park industry has developed amazingly wonderful attractions that have doubtless contributed to the growth of the industry, but the degree to which they have contributed is still unknown today. With an increasing call for accountability (Ambler, 2003; Doyle, 2000; Lenskold, 2003) I believe the theme park industry will not be able to avoid 'establishing a relation between a certain effort and a certain effect, such that one can justify the effect up front and verify the effect afterwards'. Although it is hard, and maybe even impossible, we should at least give it a try to find relevant and useful relations between investment efforts and -outcomes. I will start this dissertation with an open-minded, maybe naive view on accountability. I believe that the relatively high cost of analysis (three/four years of research) is worth spending because it answers one critical question: Can we find out whether investments in new attractions pay off?

There are three challenges to the measurement of marketing productivity (Rust, Ambler, Carpenter, Kumar & Srivastava, 2004). The first challenge is relating marketing activities to long-term effects. The second challenge is the separation of individual marketing activities from other actions. Third, the use of purely financial methods has proved inadequate for justifying marketing investments: Nonfinancial metrics are also needed. In the next section I will show how these challenges have (implicitly) been taken into account.

1.3. Research questions and purpose

The concrete management question as mentioned in the introduction is translated to a more abstractly-formulated research question:

What is the impact of new attractions on the performance of European theme parks and how may this effect be explained?

Answering this question will, on the one hand, contribute to the very limited academic study on investment in theme parks and on the other, offer theme parks the opportunity to increase the effectiveness of their future investments. If we are able to find an explanation for the observed effects, it will be possible to provide a better foundation for investment decisions in European theme parks. Because the amount of the investments in new attractions well exceeds the annual profits of most parks, knowledge of the possible effects of investments represents a significant risk reduction for the parks. Thus, an answer to the above research question would make a direct contribution to the continuing existence of theme parks. The purpose of this dissertation is therefore as follows:

To develop a research tool to chart the effects of new attractions in European theme parks in order to increase the chance for successful investment for the theme park industry.

To achieve this purpose, the central question has been translated into three research questions that will be answered in this report:

1. What is the relative and perceived importance of investing in new attractions?

2. What are the effects of investing in new attractions?

3. How can the effects of investments in new attractions be explained?

Section 1.4. contains a description of how these research questions were examined.

1.4. Research methods

To get the most accurate idea of the influence of new attractions, I used triangulation of research methods and perspectives. I approached the subject, in a manner of speaking, working out gradually from the centre. With advancing knowledge I followed the path unwinding. The dissertation consists of a collection of five articles on aspects of the same topic connected by an introductory and concluding chapter. There is no strict chronological order in the chapters but the order is based on the relation to the research questions, in the following way:

1.	Importance of new attractions	Chapter 2, 3
2.	Effects of new attractions	Chapter 3, 4, 5, 7
3.	Explanation of effects of new attractions	Chapter 5, 6, 7

Below you find an overview of the chapters of this dissertation, and the status regarding submission and publication:

Chapter 2	The (changing) market of theme parks (not submitted)
Chapter 3	A management perspective on the impact of new attractions Journal of Vacation Marketing (accepted May 2010, published April 2011)
Chapter 4	Impact of New Attractions on Theme Park Attendance Worldwide Hospitality and Tourism Themes Journal, 2(3), 262-280 (published)
Chapter 5	Achieving Attraction Accountability through an Attraction Response Matrix Journal of Travel & Tourism Marketing, 27(4), 361-382 (published)
Chapter 6	Effects of co-branding in the theme park industry: A preliminary study Journal of Contemporary Hospitality Management, 22(6), 775-796 (published)
Chapter 7	The impact of (not) theming an attraction in the global theme park industry Journal of Travel & Tourism Marketing (submitted November 2010)
Chapter 8	Synthesis and conclusion (not submitted)

1.4.1. Research question 1: Importance of new attractions

My first goal is to understand the importance of investing in new attractions for the theme park industry. The results of the research related to this research question can be found in the chapters 2 and 3 and serve as a validation of the research question of this dissertation.

To determine the importance of investing in new attractions, first of all I demonstrate the results of desk research in chapter 2. Secondary sources are consulted regarding the total financial market of theme parks and new attractions. I also give an analysis of all new attractions opened in all European parks since 2008. For this analysis, I first assembled a list of all parks in Europe. I then found out what new attractions these parks had opened in the past 3 years. I have divided the new attractions into seven main groups and show the analyses per country, year and attraction type.

A second research method was a survey conducted among the general managers of parks (chapter 3). Although insight into the influence of new attractions is still limited (Cornelis, 2009), there are years of experience within the industry that probably lead to valuable insights on aggregate. By means of a survey and supplementary in-depth interviews, I found out what the industry itself thinks about the issue. They were asked to indicate the relative position of investment in new attractions both in the short term and in the long term.

1.4.2. Research question 2: Effects of new attractions

The second goal of this dissertation is to find out whether the effects of new attractions (in the past) can be calculated. This second research question was also researched in multiple ways. A start was made on an exploratory literature study to get an idea of all the possible effects of new attractions. The results of this study are not further classified into an exclusive and exhaustive system because the added value for the aim of this study would have been limited. The results were used as a frame of reference for the research discussed in chapters 5 and 7, as well as for the theoretical context of the chapters 4 and 7.

For this second research question, the managers of theme parks were also asked to give their opinions. A survey was used to find out what the general management of theme parks believe were the effects of the latest new attraction for their park and what the effects would have been if no new attraction had been added in that year. Where necessary, clarification was obtained by e-mail, telephone and/or face-to-face conversations. The results were analysed by frequency and year of investment, among other aspects (chapter 3).

Seven parks were selected on the basis of the classification in section 2.1.1. and supplied usable historical data for an econometric analysis. This econometric investigation has shown what the actual behavioural effects of new attractions are in the long term (challenge 1). At the parks in question, I tried to go back in the records and find out as far as possible the visitor numbers on a daily or weekly basis. Then supplementary information for the same time period was gathered, again on a daily or weekly level, such as temperature, precipitation, public holidays, marketing budget and the most important independent variable, i.e. whether or not a new attraction had been added during the relevant period. The data were analysed by park using the error correction model. A basis for this method and the results of the participating parks can be found in chapters 4, 5 and 7.

1.4.3. Research question 3: Explanation of effects of new attractions

The third goal of this dissertation is to develop a way of understanding the effects of new attractions. The basic assumption behind this dissertation is that the impact of new attractions for European parks should be studied on a situational basis. What is true for park A is not by definition true for park B, because the situation of park A may be completely different than that of park B. This has to do, among other things, with the social origin of the various parks (Anton Clavé, 2007), but also with the phase of the park's product life cycle, the number and type of existing attractions in the park and countless other factors. To arrive at a more abstract level of knowledge for the industry, I therefore looked for a model to explain the results I found for each park. For this purpose I carried out a qualitative ZMET[1] study (Zaltman Metaphor Elicitation Technique) among 23 respondents at a theme park in The Netherlands into the experience of various attractions in the park and a further 15 visitors to a theme park in Germany. The explanation of this method is contained in chapter 5, and the results in chapters 5 and 7. The analysis of the ZMET study gave rise to an Attraction Response Matrix. This is a matrix showing, in an integrated way, how the influence of the investment in a new attraction in relation to other contextual factors (challenge 2) can be charted. The Attraction Response Matrix offers the possibility of finding an explanation for the behavioural effects of new attractions by application of the error correction model.

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[1] the author is indebted to Gerald Zaltman (Harvard Business School) and research company Altuition (The Netherlands) for training and allowing to use ZMET™. The patent (USA Patent Number 5,436,830) is owned by Olson Zaltman & Associates, LLC.

In chapter 6 I present a classical experiment showing that disappointing behavioural effects for a particular new attraction may possibly be caused by a poor match between the attraction and the brand essence/assets of the park. The experiment described in this chapter was conducted before the Attraction Response Matrix was developed but nonetheless it shows the importance of nonfinancial and non-behavioural metrics (challenge 3) for understanding the impact of new attractions.

In chapter 7, finally, I present an article describing the effects of theming in the context of the Attraction Response Matrix. For this article, I used a combination of literature study, ZMET and observation. All 672 attractions of the top 20 parks in Europe (2007-2009) were carefully observed and, using a model based on literature study, they were coded and analysed. Finally, based on theory, a conceptual model was developed that serves to better clarify the effects of one of the most important characteristics of attractions, theming (chapter 7).

The challenges mentioned in the sections 1.1 and 1.2 concerning predictability in the cultural industries and mentioned by Rust et al. (2004) concerning accountability in general are not completely resolved by this research. However, I believe I have shown some efforts how to accommodate them. My final thoughts about this can be found in chapter 8.

The table below gives an overview of the way the research questions are dealt with. This table also shows the chapters where these items can be found.

Table 1 *Overview of research questions, research methods and chapters*

Research question	Method	Chapter
Importance of new attractions	Desk research	2, 4
	Managers' survey	3
	In-depth interviews	3
	Econometrics	4
Effects of new attractions	Desk research	4, 5
	Managers' survey	3
	Econometrics	4, 5, 7
	In-depth interviews	3
	ZMET	5
	Theory	5
Explanation of effects of new attractions	ZMET	5, 7
	Classical experiment	6
	Theory	6, 7
	Observations	7

1.5. Delineation

The study had a number of preset parameters and some limitations that were observed in hindsight. Before the study began I chose to limit the scope to the European market. The most important reason for this was that the European market is in a different phase of its product life cycle than the other two important regions, USA-Canada and Asia (Anton Clavé, 2007). Because the phase in the product life cycle appears to be an important factor for the effect of new investments (Kotler & Keller, 2006), I decided to employ the (temporal) research budget for research in just one region. For practical and ambitious reasons this region is Europe. In this report, I will not qualify European theme parks as 'European' every time. Unless otherwise stated, the reader may assume the European region is being referred to. A second delineation is the extent of the research population. The study consists of a number of sub-studies and the resulting articles. It was not possible to maintain a strict consistency between the participating parks in the studies in question. In chapter 2 I report on research regarding all European parks including the parks that were part of a chain, while the research population in chapter 3 consists of the top 200 parks, not including chain parks. The added value of adding the chain parks in chapter 2 prevailed over the desire for consistency. Finally, in chapter 7, I present research that relates to the top 20 parks. Most parks are very reticent when it comes to providing financial information, so it was not possible to perform all the desired analyses. Thus, no statements are made in a general sense regarding the amount of investments. This is only done for a few specific parks that participated in the study described in chapters 5 and 7. Because the most important factor in the financial success of amusement and theme parks is determined by visitor numbers (ERA/AECOM, 2009; Wanhill, 2003, 2008b), and this aspect is discussed in the study, it is nevertheless possible for the reader to use results to calculate relevant financial figures.

1.6. Structure of dissertation

In the following chapter a picture is painted of the changing market of theme parks. For this purpose desk research will be employed as well as supplementary primary research. Chapters 3 to 7 will feature the five articles that, each from a different perspective, attempt to give an answer to the research questions framed in the chapter. Chapter 3 sheds light on attraction accountability from the management perspective. Chapter 4 is of an econometric nature. There I discuss the statistical way in which new attractions can be researched. In chapter 5 I arrive at an Attraction Response Matrix with which it is possible to conduct research in a systematic and structured way regarding the underlying explanations for the behavioural and other effects of new attractions. Chapter 6 describes a study that is, in fact, an application of the aforementioned Attraction Response Matrix. Chapter 7 zooms in on the importance of theming. Chapter 8, finally, contains a summarising and reflective overview of my thoughts and opinions and those of key industry figures. In this chapter, I will make up a balance sheet of what the actual situation is, how the industry views the findings and working methods, and what further steps are desirable and necessary for the future. I conclude with a personal note in the epilogue.

Chapter 2 The (changing) market of theme parks

This second chapter is a discussion of the (changing) market of theme parks. In the first section I survey the historical development of parks and come to a definition and categorisation of theme parks. In section 2.2 some relevant industry figures are presented; section 2.3 is about new attractions, and the last section of this chapter focuses on the trends in the theme park market.

2.1. Historical landscape of (theme) parks

In the first two chapters of his book *The Global Theme Park Industry,* Anton Clavé describes in detail how theme parks as we know them today arose from their predecessors such as (European) pleasure gardens, fairs, universal expositions and amusement parks. Young and Riley (2002) also explain clearly in their book *Theme Park Landscapes: Antecedents and Variations* that theme parks are no isolated postmodern phenomenon that suddenly appeared on the scene, but that they have their roots in historical developments. Section 2.1.1 is based primarily on these two historical overviews and the original sources. In 2.1.2, I arrive at a definition and categorisation of parks that will be used throughout the rest of this dissertation.

2.1.1. History of (theme) parks

The opening of Disneyland in 1955 is often described as the birth of the contemporary theme park (Anton Clavé, 2007), even though theming was already used in other amusement parks prior to this event (Bryman, 2004; Wanhill, 2008b). An example would be the Efteling, located in the Netherlands, which opened in 1952 and utilizes various degrees of theming as well (Anton Clavé, 2007; Wanhill, 2008b). In fact, according to Botterill (1997), Robillard (1993) and Samuelson and Yegoiants (2001), the origins of contemporary theme parks lie in medieval fairs and carnivals, gradually evolving into the permanent fairgrounds of the sixteenth to eighteenth centuries. It is a particular type of permanent fairground, the pleasure garden, that several authors agree was a precedent to contemporary theme parks (Anton Clavé, 2007; Botterill, 1997; Harwood, 2002; Robillard, 1993; Schenker, 2002; Wanhill, 2008b). Most scholars agree that sixteenth- to nineteenth-century European gardens were the major progenitors of theme parks. Landscape designers such as Andre Le Nôtre and William Kent tapped their aristocratic clients' historic and contemporary sensibilities to transform villages, forest, and fields into spaces rich with visual references, innuendoes, hints, and winks. Designers rejected explicit language and extracted symbols from their visitors' cultural backgrounds to generate interest and promote responses. During the 16th and 17th centuries, designers did not purposely attempt to instrumentalize culture but instead drew unsystematically from their social and environmental contexts. A critical step on the path to today's theme parks was finally taken during the late eighteenth century when William Chambers presented his psychological insights as "sinophilic" landscape theories and linked specific designs and features to particular states of mind. In the two hundred fifty years since Chambers, landscape developers have refined this mood-altering process and now calculatedly employ it in theme parks (Young, 2002).

There are other similarities between pleasure gardens and contemporary theme parks (Schenker, 2002). Both are commercial landscapes designed to amuse the public in a competitive market for leisure entertainment. Like theme parks today, pleasure gardens plundered history, popular culture, and the arts for thematic inspiration. They offered fantasy and an escape from the workaday world.

Pleasure gardens were complex urban landscapes, developed as a reaction to the rise in urbanization and industrialization as a method of returning to nature (Botterill, 1997). At the height of their popularity, pleasure gardens were crowded, lively places. Tree-lined walks, lawns, and flowers had dominated the earliest of these spots, but aggressive proprietors built ever larger and more elaborate halls and stages over the natural features in order to meet public expectations. It exposed visitors to theatre, concerts, fireworks, light spectaculars and attractions (Samuelson & Yegoiants, 2001; Young & Riley, 2002). Most pleasure gardens disappeared in the mid-19th century due to changing consumer tastes, yet some live on to this day, most notably Tivoli Gardens in the centre of Copenhagen (Anton Clavé, 2007). At the beginning of the twenty-first century, theatres often occupy more space in theme parks than do gardens (Young, 2002).

At the same time that pleasure gardens began appearing all over Europe, seaside resorts began to be developed, especially in the United Kingdom, and the transition from permanent fairground to amusement park commenced (Botterill, 1997; Samuelson & Yegoiants, 2001). This transition was not only brought about by the rise of seaside resorts, it was also furthered by the growing popularity and importance of World's Fairs (Anton Clavé, 2007; Botterill, 1997). World's Fairs contributed significantly in the shaping of the contemporary theme park industry due to the fact that they were not focused on the exchange of goods (as was the norm in that period), but had a strong emphasis on consumption (Anton Clavé, 2007; Botterill, 1997). According to Adams (1991) the 1893 Universal Exposition in Chicago is fundamental in understanding the step from amusement to theme parks. In fact, together with the one held in 1939 in Flushing Meadows, the Chicago exposition shaped Walt Disney's idea of creating "a place for people to find happiness and knowledge" (Zukin, 1995, p.56). According to Sorkin (1992), theme parks transformed the 'celebration of production' concept behind the expositions and amusement parks into the concept of 'production of celebration'. Weinstein (1992) notes that the latter distinction is typical of the difference between theme parks and amusement parks.

Ever increasing disposable income, an increase in leisure time for the working and middle classes and the rise of new mass communication systems have further contributed to the development of contemporary theme parks (Anton Clavé, 2007). Another important factor was the influence of the movie industry. Both cinemas and theme parks reshape reality by creating a spectacle that is relived by the audience with the use of scenes and a themed environment. Additionally, cinemas and theme parks both stimulate consumption due to the way that the commercial nature of their products/service is highly unrecognizable (Anton Clavé, 2007). It should come as no surprise that several movie studios have or have had ownership of theme parks (Anton Clavé, 2007). Anton Clavé (2007) argues that contemporary theme parks have taken over the position once dominated by amusement parks since circa 1950, around the time of the opening of Disneyland, mostly due to their clean and structured nature, their safety and the overall family-oriented nature of theme parks as such. In line with the social origin of theme parks described above, Anton Clavé (2007) divides parks into four types that are still discernible today in more or less prototypical form: pleasure gardens, amusement parks, theme parks and parks based on the world of the cinema. These are described below on an individual basis from their historical context in order to arrive ultimately at a definition for theme parks in section 2.1.2.

2.1.1.1. Pleasure gardens

As noted above in 2.1.1, the first pleasure gardens were opened in the 16th century, long before the World's Fairs, amusement parks and theme parks. These popular venues were often located next to inns and taverns (Botterill, 1997). The pleasure gardens represented the democratisation of aristocratic

leisure. Later, pleasure gardens were also seen as therapeutic, educational and artistically inspiring (Harwood, 2002). Visitors were bombarded by stimulation in the form of fantastic entertainment, extravagant fireworks, displays, panoramic special effects, exotic performers, a cacophony of noise and light (Schenker, 2002). Samuelson and Yegoiants (2001) state that the pleasure gardens were complex landscapes where theatre plays were held, concerts, fireworks and, later, illuminations and balloon rides. Often the pleasure gardens had one or more themes, simulating the landscapes of various regions by means of light shows and fireworks. In addition to concerts and theatrical performances, there were also unthemed attractions for young and old (Botterill, 1997). Pleasure gardens drew a large proportion of their visitor numbers from the immediate vicinity. Residents of the city and its environs came daily to enjoy concerts, pantomime, architecture, rides, music, shows, lights and flowers (Loring, 2007). In contrast to present-day theme parks, a separate access price was often charged for each attraction, just as at 19th-century amusement parks. Well-known modern examples are Tivoli Gardens (Denmark), Prater (Austria), Liseberg (Sweden) and Parque d'Atracciones (Spain).

2.1.1.2. Amusement parks

Coney Island in New York City is regarded as one of the first real amusement parks (Hannigan, 1998; Ritzer, 1999), but the oldest amusement park in the world is really Bakken in Copenhagen. This park, the first to bear the characteristics of a true amusement park, was opened in 1583. Bakken is still open to the public and fully operational. In the 19th century more amusement parks followed in Europe. The best-known are Grona Lunds in Stockholm (1883) and Blackpool Pleasure Beach (1896). The definition of an amusement park according to Ritzer (1999) is "entertainment for the masses, great spectacles, use of technology for consumption rather than production, the commercialization of 'fun', and the offer of a safety valve where people can expand their energies without threatening society" (p.3). The use of technology for consumption originated during the World Expositions; the giant Ferris wheel, for instance, was introduced at the 1893 World's Fair in Chicago (Zukin, 1991). Fordism played an important role in the development of these amusement parks; rationalisation brought the prices down, making the parks accessible for the general public. This change allowed parks to target the up-and-coming working class, instead of only the upper class (Botterill, 1997). Amusement parks, like theme parks, often have one or more themes, such as the countries theme of Walibi World (Netherlands). The difference, however, is that this theme is not as detailed or as thoroughly carried through; for instance, there may be themed attractions, but the theme is not carried through in the area around the attraction (Wong & Cheung, 1999). The attractions thus resemble those in historical amusement parks and fairs. At amusement parks, in contrast to theme parks, roller coasters are the most important attractions. Anton Clavé (2007) also notes that these parks make their profits primarily from ticket sales and consumption in the park, and to a much lesser degree from brand consumption. Well-known examples of European amusement parks are Blackpool Pleasure Beach (United Kingdom), Mirabilandia (Italy), Bobbejaanland (Belgium) and Bakken (Denmark).

2.1.1.3. Theme parks

The opening of Disneyland was the dawn of a new type of theme park (Milman, 2001). Disneyland was not just a park where people could enjoy themselves by experiencing the attractions; Disneyland was a theme park. An important difference between amusement parks and theme parks is the degree of theming (Bryman, 2004; Jones & Wills, 2005): A theme park is essentially an amusement park to which narratives are applied. Donaire (1999) in Anton Clavé (2007) adds that "a theme park is, literally, a utopia of consumption. It is not only, therefore, a place produced for leisure, like the traditional amusement parks, but a place of fiction that bases its existence on the materialization of a fantastic narration

through shapes, volumes and performances" (p.21). In theme parks, visitors are drawn into a story/theme and experience the park within this story/theme (Pine & Gilmore, 1999). It is an alternative world. By naturally integrating products and characters into the park and carrying it through into the details, the authenticity of the chosen theme is guaranteed. This also leads to increased consumption of the brand both in and out of the park (Anton Clavé, 2007). McClung (1991, 2000) and Milman (2009) have demonstrated that the theme of a theme park is one of the most important factors that influences a tourist in choosing a park. Theming a park, however, is very expensive and requires a centralised approach to various factors (Anton Clavé, 2007). Davis (1997) and Botterill (1997) have observed another difference between amusement parks and theme parks besides that of theming: a theme park is completely tailored to the present-day wishes and requirements of the consumer, such as consumption (Sorkin, 1992) and experience (Pine & Gilmore, 1999). Mitrašinovic (2006) describes theme parks as purveyors of experiences with their own identity and image in which commercial thinking is prominent. Ritzer (1999) speaks of 'cathedrals of consumption'. According to Adams (1991), parks like Disney embrace control, exclusivity, minute planning, and fastidious sanitation to actualize a segregated promised land and at the same time engineers entertainment extravaganzas. In contrast to the amusement parks, which target the working class, theme parks target the rising middle class (Botterill, 1997). Examples of European theme parks are Disneyland Paris (France), Europa-Park (Germany), the Efteling (Netherlands) and PortAventura (Spain).

2.1.1.4. Movie parks

Anton Clavé's fourth category is that of the movie parks. In the past, TV studios were open for visitors to take backstage tours. Today, however, the relationship between cinema and parks is more comprehensive. In fact, it is not just that precedents of parks can be found in the visits to film studios themselves but it is the language of the cinema that is incorporated into the system of presenting the reality of parks: hence, today, one of the reasons for their success. In 1960s and 1970s, many media conglomerates entered the world of entertainment, tourism and mass leisure pursuits by opening or taking over theme parks. Conglomerates are corporations consisting of a group of companies that deal in different products and services (Hesmondhalgh, 2007) and in the case of media conglomerates, these products and services are nearly all media-oriented, such as television, film, internet and radio. Especially in North America, many theme park owners have a connection with media conglomerates like Disney and Universal (Anton Clavé, 2007). There are a number of reasons why media conglomerates have entered the world of theme parks. Davis (1996) argues that there is a great deal of money to be made in theme parks in a short amount of time. Although they are expensive to build and require careful maintenance and management, they are real 'cash cows' when they are going well. With the extra liquidity they provide for the conglomerate, other projects can be supported. Moreover, in this way there is a form of risk spreading, which is essential for companies in the entertainment sector. Hesmondhalgh (2007), Lieberman and Esgate (2002), Neuman (1991), and Wolf (1999) observe that the majority of their productions are unsuccessful. The loss can then be made good by the extra profit from theme parks. The risks of the theme park itself are also spread. The second reason why media conglomerates are drawn to the theme park industry is the fact that theme parks are regarded as a new form of mass media, in which the previously separate components of entertainment, advertisement, marketing and public relations come together. In this way, they can expand their value chain and add even more value to the company (Hesmondhalgh, 2007; Mommaas, van den Heuvel & Knulst, 2000). By investing in horizontal integration, they add extra value to their value chain. This enables them to market their content in as many possible ways, both physically and symbolically, and earn more from it (Hesmondhalgh, 2007; Mommaas et al., 2000). This means more of a guarantee with regard to

the distribution of their content (Milman, 2001; Wolf, 1999). This extra opportunity to market their content is perhaps the greatest reason that media conglomerates are active in the theme park industry (Penseel, 2006; Wasko, 2001). By packaging goods and services in a new way, the company retains the consumer's attention (Hesmondhalgh, 2007; Pine & Gilmore, 1999). Wolf (1999) also notes that 'growth' is the only choice companies in the entertainment sector have. Well-known examples of European parks with a strong relationship to the symbolic world of film, music and theatre are Disney Studios (France), MoviePark Germany (Germany), Warner Parque Madrid (Spain) and Plopsaland de Panne (Belgium).

2.1.2. Definitions and types of theme parks

In the previous chapter we mentioned the Efteling theme park. As we saw in the previous section, however, this term for the product category is not an exclusive choice. In The Netherlands, we use many other terms for the category that includes the Efteling without making a clear distinction as to what we mean. We speak of *pretparken* (fun parks), *attractieparken* (attraction parks), *familieparken* (family parks) and *themaparken* (theme parks). The term *pretpark* is in the Netherlands the most common designation for the category we are discussing. The name is based on the ultimate effect being aimed for in the industry, the creation of fun. This, however, is a fairly banal term for all the effects that are possible in a *pretpark*. Besides fun, more lofty effects can be realised, such as happiness, transformation, rites of passage and imparting meaning. For this reason, the term *pretpark* is not enthusiastically embraced by everyone in the industry. *Attractiepark* is a term more often in use. This term, instead of focusing on the effect, references what is on offer: attractions. From a marketing perspective, in which the consumer and his needs should be central, this term also has its limitations. After all, a park has more to offer than just attractions. The Efteling used to have a very popular picnic ground. Children could romp while parents recovered from the morning's exertions. Are we supposed to call this an attraction? And how about all the food and beverage outlets and shops? They are an integral part of the product on offer, but are not generally considered an attraction. The term *familiepark* focuses on the ultimate target group, without describing the effects or the product on offer. It is true that this target group is the most welcome in most Dutch parks, but the term still is not a perfect fit. The same parks termed 'family parks' also derive a significant proportion of their visitor numbers and turnover from school trips and the business-to-business market. The term *themapark* (theme park) is not really used in The Netherlands. The only park that would really qualify in 2010 is the Efteling with its well-developed fairy tale theme. What is true for The Netherlands in industry terminology is also true for other European countries. In Germany, the terms in use include *Freizeitpark* (leisure park), *Erlebnispark* (experience park), *Abenteuerpark* (adventure park) and *Themenpark* (theme park) (Rossmann, 2009). The same can be said of these terms with regard to their appropriateness and use. In France the terms in common use are *parc thematique, parc à theme* (theme park) and *parc loisir* (leisure park) and in Spain the terms *parque tematico* (theme park), *parque d'atracciones* (amusement park) and *parque de ocio* (leisure park), or even *equipamento de ocio* (leisure facility) are used.

Academic journals and industry magazines often distinguish only between amusement parks and theme parks. Because of the broad acceptance of this dichotomy within the theme park industry, I will also use these terms in my dissertation. I will also use the four categories established by Anton Clavé (2007) in some of the studies, but in general the simplified two-category system will be used. In the discussion above we saw that theme parks are often compared to amusement parks. What it comes down to is that a theme park is comparable to an amusement park, but that the former fits in better with the desires and requirements of the present-day consumer (Adams, 1991; Botterill, 1997; Davis, 1997),

especially in the areas of consumption (Donaire, 1999; Mitrašinovic, 2006; Ritzer, 1999; Sorkin, 1992; Weinstein, 1992) and experience (Mitrašinovic, 2006; Pine & Gilmore, 1999), and that theme parks, in contrast to amusement parks, have better-developed and more detailed theming (Bryman, 1999b, 2004; Jones & Wills, 2005: Wong & Cheung, 1999). Zukin (1995) adds a fourth and fifth distinction "Leaving aside other conceptual and operational questions, the most immediately perceptible difference between an amusement park and a theme park lies in the fact that, whereas amusement parks present numerous attractions in a relatively small area, each of which has a specific price, theme parks present a small number of attractions in a large-scale, landscaped environment – which does not generate revenue directly – at a generally unique price" (p.18).

In my view, the similarities and differences between the four categories of Anton Clavé (2007) and the dichotomy discussed above are as follows. All four categories of parks are seen by their visitors as places through which to temporarily 'escape' from the conditions and worries of their everyday lives (Tuan, 1998), aided by the 'sanitized surroundings' (Sorkin, 1992). However, theme parks and movie parks are more of a cultural creation than pleasure gardens and amusement parks; they are a complex symbolic space from a social and cultural point of view. This is a matter of degree, a question of balance between parks´ functional and communicative aspects. Amusement parks and pleasure gardens signify as well and are also open for interpretation, but the primary aim of amusement parks and pleasure gardens is not meaning, but amusement and pleasure (see Hesmondhalgh, 2007 for a similar argument). Theme parks are, like advertising, characteristic products of consumer culture based on making profits from the production of meanings (Ren, 1998 in Anton Clavé, 2007). I believe the same can be said of movie parks. The only difference between theme/movie parks and the rest of the classic products of this economy of signs is their location in concrete places. Thus, it may be considered that theme/movie parks are, therefore, a product based on signs and space.

And thus, perhaps, we have described the differences between amusement parks and theme parks, but we still lack a clear definition of a theme park. According to Tourism Research and Marketing (TRM, 1995), making a precise definition of the concept of theme park has historically been avoided due to the existence of multiple similar formats that hinder such a task. Moreover the definitions that have been made have generally been seen as incomplete or inaccurate. This is why some authors choose to define parks on the basis of a series of characteristics. In general terms, no characteristic taken individually suffices to differentiate a theme park from other attractions; all of them are necessary. To this end, below Anton Clavé (2007) presents a characterization that allows one to positively identify theme parks as 'ludic places consecrated to distraction, evasion, imagination, knowledge and play' on the basis of a series of criteria, and differentiating them from other parks and recreational areas. Theme parks are recreational areas, therefore, where the following characteristics can be observed:

- They have a thematic identity that determines recreational alternatives.
- They contain one or more themed areas.
- They are organized as closed spaces or with controlled access.
- They have a great capacity to attract families.
- They contain enough rides, shows and systems of movement to create a visit that lasts on average some 5 to 7 hours.
- They present atmospheric forms of entertainment (musicians, characters or actors who perform in the street 'free of charge').
- They have an important commercial vocation (fundamentally food and beverages and shops).

- They have high levels of investment per unit of ride or show capacity.
- They have high-quality products, service, maintenance and standards of cleanliness.
- They manage their productivity and consumer processes centrally.
- They incorporate technology as much in the production processes as in those of consumption.
- Generally, though exceptions do exist, they have a single ('pay-one-price') admission system.

On the basis of this characterization, a theme park can be considered a system of representation of changeable scale whose purpose is entertainment and consumerism (Anton Clavé, 2007). For Ren (1998), a theme park is, more specifically, the landscape resulting from a cultural representation: a place where knowledge and technology are applied to the creation of a new form of organization of production based on signs and space. Based on this, parks are planned in order to materialize a commercial atmosphere in which the basic management principle is that of getting visitors to move, have a good time and spend (Anton Clavé, 2007). In this dissertation I have made a distinction between amusement parks and theme parks on the basis of the characteristics set forth by Anton Clavé, including the characteristics relating to theming as a vital condition. I use the term 'theme parks' in this thesis in two different ways. Sometimes I use the term in its general meaning to refer to both theme parks and amusement parks. However, I sometimes use the term in the more limited definition of theme park (in contrast to amusement park). It will be clear from the context and explanation which of the above meanings is intended.

2.2. Industry figures

It is not easy to give an exact overview in figures of the theme and amusement park market in Europe. There are only a few parties that supply data for the European market (in particular, ERA/AECOM, PricewaterhouseCoopers (PwC), Mintel Oxygen en IAAPA) and each has its own definition of an amusement and/or theme park—which in any case has been subject to change over the years. They also differ in the way in which they count visitor numbers and revenues. The parties are also dependent on the cooperation of the theme parks in Europe for obtaining their data, and most parks are unfortunately very reticent about providing such data. Moreover, not all reports are published on an annual basis, except for the TEA/ERA attendance reports, which makes comparisons between the various methods next to impossible. In some countries, it is possible to obtain information via an umbrella organisation, but in most countries detailed data are lacking. Thus, it is also impossible to make any statements about the European market as a whole by this means (Stevens, 2003). I have based this section, therefore, on the most recent and very detailed analysis of ERA/AECOM (2009) into the impact of theme parks in Europe (2.2.1) and have added the results of my own research in cooperation with IAAPA Europe in section 2.2.2..

2.2.1. Impact study of European amusement and theme park industry (IAAPA)

ERA was commissioned by IAAPA Europe to conduct a preliminary assessment of the economic impact of the theme and amusement park industry in Europe. The aim of the preliminary assessment was to provide top-line estimates of economic impact, based on an initial sample of attractions, previous studies and other published data. The output of the study provides estimates of the scale of visits, revenue and employees across the 17 member states of the European Union that have theme and amusement parks and Norway and Switzerland, together with estimates of the direct, indirect and induced economic impact of the attractions. The aim of the IAAPA impact study is to assess the

economic impact of the theme and amusement park industry in the 27 member states of the European Union, together with Norway and Switzerland. However, 10 member states including Bulgaria, Czech Republic, Estonia, Latvia, Lithuania, Luxembourg, Malta, Romania, Slovakia and Slovenia do not have qualifying theme or amusement parks and therefore have no economic impact. The output does not include estimates of the off-site economic impact of visitors to theme and amusement parks. The study is based on estimates, assumptions and other information developed by ERA from its independent research effort, general knowledge of the industry, and information provided by and consultations with the client and the client's representatives. The report is based on information that was current as of August 2009 and ERA has not undertaken any update of its research effort since that date.

ERA interviewed the national association for each country, via contacts provided by IAAPA, to gather existing, publicly available data on the industry. Together with IAAPA Europe, they then shortlisted a range of European attraction groups and individual large and small theme and amusement parks across the studied countries with the aim of benchmarking a representation across a range of types of parks and the main geographies. Each of these companies was requested to complete a questionnaire for the study, and ERA has analysed their response data to build a sample. The resultant sample includes 28 theme and amusement parks across eight countries. Disneyland Resort Paris, Merlin Entertainments and Compagnie des Alpes submitted combined information for their parks. These 28 theme and amusement parks will be referred to as the base sample for this assessment. All figures provided by the base sample refer to the 2008 operating year. From the base sample as well as published data and previous studies, ERA determined ratios for performance for each category of theme park or amusement park and applied these ratios to estimate the economic impact of the remaining theme and amusement parks. The remaining 280 theme and amusement parks will be referred to as the estimated sample for this assessment.

2.2.1.1. Economic impact of European theme parks

The European leisure market consists of an estimated 308 theme and amusement parks, which hosted an estimated 145.5 million visitors in 2008, as can be seen in table 2 (general and revenue estimates by country). In this study a theme or amusement park is defined as a leisure facility with at least one fixed ride. The parks reviewed also operate 36 hotels, the majority of which are located in France and Germany. France has the most significant theme and amusement park market and is estimated to account for 33 percent of the direct economic impact (total revenues) in Europe. Germany and the United Kingdom are also considered important players in the industry, accounting for 17 and 14 percent of the direct economic impact in Europe, respectively. Other countries with major theme and amusement parks include Spain, Denmark, The Netherlands, Italy and Sweden. These eight countries are estimated to account for 93 percent of the total direct economic impact in Europe and 88 percent of total visitors.

The industry generated an estimated €4.3 billion in revenues in 2008, of which 82 percent is attributable to park spending (park admissions and other in-park), 15 percent to hotels and 3 percent to sponsorships, corporate events and other income streams. Based upon economic multipliers used for the recreation industry, ERA estimates that theme and amusement parks have an additional positive impact of €4.3 billion on the European economy. This takes into account the operating costs of the theme parks including goods and services, wages and capital expenditures as well as the secondary effects of the industry's business-to-business expenditure on the supply chain and the secondary effects of employee wages. In addition to the economic impact theme and amusement parks have a positive

fiscal impact on Europe of €714 million in 2008, generated from VAT tax revenue, corporation taxes, employment taxes and business rates. European theme and amusement parks employed an estimated 47.590 FTEs. Employees were paid an estimated €1.3 billion in direct wages over the year.

Table 2 *General and revenue estimates by country (from ERA/AECOM, 2009)*

	General				Revenues					
	# Parks in Market	# Parks Surveyed	# of Hotels	Total Attendance	Park Admissions	Other in-Park	Hotel Revenue	Non-visitor Revenue	Total Revenues	% of Europe
				(000s)	*(€ '000s)*	*(€ '000s)*	*(€ '000s)*	*(€ '000s)*	*(€ '000s)*	*(%)*
Austria	11	0	0	3,900	22,500	22,100	-	4,000	48,600	1.1
Belgium	9	2	0	4,400	65,600	37,800	-	1,500	104,800	2.5
Cyprus	1	0	0	150	390	70	-	20	490	0.0
Denmark	13	2	2	11,300	114,400	137,300	9,100	29,400	290,200	6.8
Finland	7	0	0	2,900	24,400	24,600	-	5,100	54,000	1.3
France	44	9	10	27,100	581,400	391,000	415,400	6,000	1,393,800	32.7
Germany	76	3	12	25,500	367,300	226,400	96,100	20,300	710,200	16.7
Greece	4	0	0	2,100	10,200	2,200	-	1,200	13,600	0.3
Hungary	1	0	0	1,000	2,600	500	-	200	3,200	0.1
Ireland	2	0	0	200	440	80	-	30	550	0.0
Italy	17	1	1	8,600	106,600	65,600	12,000	4,900	189,200	4.4
Netherlands	23	4	1	12,300	159,100	99,900	8,800	9,600	277,300	6.5
Norway	5	0	0	1,600	35,000	21,500	-	1,900	58,300	1.4
Poland	4	0	0	400	940	180	-	60	1,170	0.0
Portugal	3	0	0	1,000	13,500	8,300	-	700	22,500	0.5
Spain	13	0	3	10,200	154,800	116,000	45,900	5,500	322,200	7.6
Sweden	14	3	2	8,300	76,200	84,000	15,000	7,300	182,500	4.3
Switserland	3	0	0	450	3,500	1,990	-	290	5,780	0.1
UK	58	4	5	24,100	329,200	176,600	52,000	20,300	578,100	13.6
Europe-Wide	**308**	**28**	**36**	**145,500**	**2,068,070**	**1,416,450**	**654,300**	**118,300**	**4,256,490**	**100.0**

2.2.1.2. Revenue breakdown

From the base sample, it is clear that the operating characteristics of theme and amusement parks vary significantly depending on the scale of operation and therefore ERA separated the data collected from base sample parks into five categories based on attendance and pricing structure in order to provide the best estimates of economic impact across all park types:

- Large Theme Parks: theme parks with over one million visitors
- Medium Theme Parks: theme parks with between 250,000 and one million visitors
- Small Theme Parks: theme parks with fewer than 250,000 visitors
- Large Amusement Parks: parks with a pay-as-you-go pricing structure that attract over 500,000 visitors
- Small Amusement Parks: parks with a pay-as-you-go pricing structure that attract fewer than 500,000 visitors

Based on the base sample, ERA estimate that the percentage of admission revenue to total revenue is typically around 60 percent at theme parks. The larger urban amusement parks have a strong food and beverage focus and therefore admission as a percentage is lower at 40 percent and secondary spend is higher at 50 percent. Small amusement parks typically offer little in terms of dining and retail options and have short lengths of stay and therefore the majority of income is generated through ride tickets. These findings are similar with the ones of IAAPA (2007a). Based on these findings, ERA determined total revenues for the estimated sample by dividing their admission revenues, determined through admission yield ratios, by the ratio of admission revenue to total revenue.

Table 3 *Revenue break-down (from ERA/AECOM, 2009)*

	Admission Yield	Admission as % of total revenue	Secondary Spend as % of total revenue	Non-Visitor as % of total revenue	Total
	(%)	*(%)*	*(%)*	*(%)*	*(%)*
Large Theme Parks	58	60	37	3	100
Medium Theme Parks	65	60	37	3	100
Small Theme Parks	65	60	35	5	100
Large Amusement Parks	25	40	50	10	100
Small Amusement Parks	30	80	15	5	100

Non-visitor revenue at theme parks is typically three to five percent of total revenues and is mostly generated through events and corporate sponsorship. However, large amusement parks are often popular locations for business lunches or office Christmas parties and some offer conference or meeting space. Therefore, these types of attractions can generate a higher percentage of revenue from the non-visitor category.

2.2.2. Park visitor numbers

The most reliable data with regard to visitor numbers come from the annually published TEA/ERA attraction attendance report. ERA obtains the figures used to create the report through a variety of sources, including statistics furnished directly by the operators, historical numbers, financial reports, the investment banking community and local tourism organizations, among others. The global market is studied as a whole, and each of its four main regions is also studied separately: North America, Mexico/ Latin America, Europe and Asia. There is also a table of the top global chain operators. To be included in the study, a facility in general must be gated (entry ticket required). To be included on the top chains list, a chain operator must have theme parks in its portfolio. The great disadvantage of the TEA figures is that they are limited to the top 20 for Europe. See table 4 for an overview of the top 20 parks in Europe (2006-2009).

Table 4 *Attendance numbers European top20 parks (2006-2009)(based on TEA/AECOM, TEA/ERA)*

Rank	Park	2006	2007	2008	2009
1	*Disneyland Park at Disneyland Paris*	10,600	12,000	12,688	12,740
2	*Europa-Park*	3,950	4,000	4,000	4,250
3	*De Efteling*	3,200	3,200	3,200	4,000
4	*Tivoli Gardens*	4,396	4,110	3,972	3,870
5	*Liseberg*	2,950	3,050	3,050	3,150
6	*PortAventura*	3,500	3,700	3,300	3,000
7	*Gardaland*	3,100	3,100	3,100	2,900
8	*Walt Disneys Studios Park at Disneyland Paris*	2,200	2,500	2,612	2,655
9	*Alton Towers*	2,400	2,400	2,520	2,650
10	*Phantasialand*	1,900	1,900	1,900	1,950
11	*Legoland Windsor*	1,480	1,650	1,815	1,900
12	*Thorpe Park*	1,700	1,700	1,700	1,870
13	*Parc Asterix*	1,800	1,620	1,800	1,820
14	*Futuroscope*	1,350	1,600	1,600	1,700
15	*Legoland Billund*	1,460	1,610	1,650	1,650
16	*Mirabilandia*	1,700	1,700	1,600	1,624
17	*Parque de Atracciones*	1,500	1,500	1,500	1,500
18	*Heide Park*		1,400	1,330	1,400
19	*Duinrell*	1,350		1,356	1,349
20	*Chessington World of Adventures*				1,300
21	*Blackpool Pleasure Beach*	6,000	5,500		
22	*Bakken*	2,700	2,700	2,700	
	Total	**59,536**	**60,940**	**57,393**	**57,278**

Several aspects are worth noting. First is the dominant position of Disney; the two parks together have more than 15 million visitors. From 2006, visitor numbers at the top 20 appear to have diminished. However, this is a measurement effect, because in 2008 Blackpool Pleasure Beach began using a different method of visitor registration. If we keep Blackpool Pleasure Beach out of the comparison, we see an increase in visitor numbers from 53,536 in 2006 to 55,978 in 2009; this is an increase of more than 4.5%. Visitor numbers for most of the parks show a reasonably stable pattern. The positive exceptions are the two Disney parks, the Efteling and Legoland Windsor. The negative exceptions are Tivoli Gardens and PortAventura. The positive results of the Disney parks and Legoland Windsor are particularly ascribed to investment policy in combination with strong marketing (TEA/ERA, 2008). The enormous growth in visitor numbers for the Efteling in 2009 was (almost) completely explained by the huge price discounts offered by the park in 2009.

The resort park PortAventura has clearly suffered during the recession. Fewer tourists came to Salou, and in particular guests from the United Kingdom stayed away in droves due to a sharply falling pound. It is typical of destination parks to be impacted more by a recession than regional parks, because they are located farther away from their markets, and cost more to visit, but it should also be noted that the negative growth did not actually occur until the autumn of 2008. The regional parks were mostly closed by then, while year-round destination parks were still open, so they took the fourth quarter hit. Tivoli Gardens has shown a negative trend in visitor numbers since 2006, but in 2009 this effect could primarily be explained by the climate conference which kept many tourists away due to fear of public unrest.

It is difficult to find any recent information for any of the parks that fall outside the top 20 group of TEA/AECOM (2010). Nevertheless, in collaboration with IAAPA Europe I have attempted to compile a list of all parks in Europe with regard to visitor numbers. The visitor numbers for these parks are based on information made available through official studies, press releases, articles in magazines, websites, and personal communications with managers and industry experts. For the majority of the parks this means a rough estimate used only for indicative purposes for the size of the park rather than an exact calculation. Particularly in the case of the smaller and medium-sized parks, visitor numbers are not recorded on an annual basis. The figure from the most recent year where numbers were recorded is used as a basis and, if necessary, adjusted (upward or downward) if it is known that the park experienced a positive or negative development in subsequent years. The total list comprises 271 parks which, together, realise an estimated 145 million visitors. This total number of visitors corresponds reasonably well with the numbers from ERA (and PwC). The number of parks does vary somewhat, but primarily due to the omission or inclusion of several smaller parks.

In Europe there are 13 parks with annual visitor numbers of at least 2 million (in addition to the 9 from the TEA/AECOM (2010) list these include Wiener Prater, Blackpool Pleasure Beach, Adventure Island and Bakken), 42 parks with annual visitor numbers of at least 1 million, and 66 parks with at least half a million visitors per year. The top 50 parks in Europe together see more than 100 million visitors per year, which comes down to an average of 2 million per park and more than two-thirds of the total number of annual park visits in Europe. The top 100 in Europe together bring in 121 million visitors per year, which comes to an average of 1.21 million per park and 83% of the total number of annual park visits in Europe. The smallest park in the top 100 welcomes 300,000 visitors annually.

The table below gives an overview of the top 100 parks in Europe.

Table 5 *Listing per country of the top 100 parks in Europe (from author's own research based on IAAPA Europe)*

Ranking	Country	% of parks	% attendance	Number of attendance in mio.	Mean number of attendance per park
1	*United Kingdom*	20	19.93	24.14	1.207
	Germany	20	14.63	17.12	0.886
3	*France*	10	18.56	22.49	2.249
4	*Netherlands*	9	8.81	10.67	1.185
5	*Denmark*	7	8.29	10.05	1.435
	Spain	7	7.47	9.05	1.292
	Sweden	7	5.70	6.91	0.987
8	*Belgium*	6	4.04	4.90	0.817
9	*Italy*	5	4.80	5.82	1.164
10	*Austria*	2	2.80	3.40	1.700
	Finland	2	1.65	2.00	1.000
	Norway	2	0.82	1.00	0.500
13	*Greece*	1	0.66	0.80	0.800
	Hungary	1	0.30	0.37	0.370
	Russia	1	1.48	1.80	1.800
	Total	**100**	**100**	**121.1**	**1.211**

Table 5 shows the breakdown of parks and visitor numbers per country in absolute figures and percentages, as well as the average number of visitors per park per country. The United Kingdom and Germany both have 20 parks in the top 100. Of all the large parks in Europe, 40% are located in these two countries. The United Kingdom, with 24.1 million visitors per year, leads the European top 100 list in visitor numbers, followed by France with 22.5 million and Germany with 17.1 million. The average number of visitors per park in the top 100 of Europe comes to 1.21 million per year. The average for France, of course, is skewed by Disneyland Resort Paris. If this park were kept out of the reckoning, France would have an average of 650.000 visitors per park per year. Thus, the other French parks are among the smaller venues in this top 100. The average number of visitors per park in Russia comes to 1.8 million because only Divo Ostrov (St. Petersburg) is represented in the top 100.

2.2.2.1. Chains

Table 6 shows that the Walt Disney parks attract the most visitors by far. In 2009 they welcomed more than 119 million visitors all together. At a considerable distance follow the parks owned by Merlin Entertainments (38.5 million), Parques Reunidos (24.8), Six Flags (23.8 million), Busch Entertainment (23.5 million), Universal Studios (23.4 million), Cedar Fair (21.1 million), OCT Parks China (15.8 million), Compagnie des Alpes (10.0 million) and Aspro Group (8.2 million). OCT Parks China and Merlin Entertainments are the only two chains that saw substantial growth in relation to 2008. For OCT Parks China, this was primarily realised by autonomous growth within the existing parks, whereas with Merlin Entertainments it was primarily due to a further expansion of the park portfolio.

Table 6 *Attendance per chain in millions (based on TEA/AECOM, TEA/ERA)*

Rank	Theme park attractions chain	2006	2007	2008	2009
1	*Walt Disney Attractions*	112.5	116.5	118.0	119.1
2	*Merlin Entertainments Group*	16.0	32.1	35.2	38.5
3	*Parques Reunidos*	9.2	12.0	24.9	24.8
4	*Six Flags, Inc.*	28.5	24.9	25.3	23.8
5	*Busch Entertainment*	21.7	22.3	23.0	23.5
6	*Universal Studios Recreation Group*	25.8	26.4	25.7	23.4
7	*Cedar Fair Entertainment Company*	24.7	22.1	22.7	21.1
8	*OCT Parks China*			13.4	15.8
9	*Compagnie des Alpes (Grevin)*	10.0	9.6	9.5	10.0
10	*Aspro Group*				8.2
11	*Herschend Family Entertainment*		8.9	8.3	
12	*The Tussauds Group*	14.3			
13	*Everland*	8.9	8.6		

What is remarkable is that of the twenty most visited theme parks in North America in 2009, only four were not part of the aforementioned chains (TEA/AECOM, 2010). The top ten were all in the hands of Walt Disney Attractions, Universal Studios Recreation Group and Busch Entertainment, the first six places going to Disney parks. There are only seven parks out of the North American top 20 that showed a growth in visitor numbers. The six Disney parks were all part of this group.

In Europe, only ten of the twenty most visited theme parks are part of a chain. This means that the rest of the parks are (still) individually operated. However, there also seems to be a trend in Europe towards chain formation. In particular, the growth of Merlin Entertainments Group is very remarkable. When considering the recent levels of merger and acquisition activity, it is interesting to compare the changes in the European landscape between 2001 and 2008 (table 7). As Disneyland Resort Paris celebrated its 15th anniversary in 2008, it remained the most popular visitor attraction destination in Europe, with 15.3 million visitors. Behind Disneyland Resort Paris, four major European operators have significantly altered the shape of the sector over the last six years. In 2001, 56 attractions generating estimated revenues of €200 million were operated by Merlin Entertainments, Parques Reunidos, Grevin et Cie and Aspro Ocio. By 2008, these same operators had over 175 visitor attractions with estimated revenues of approaching € 1.7 billion. This eight-fold growth in revenues has been driven by aggressive sector consolidation via single asset and portfolio acquisition strategies. Over the last three years, these four operators have undertaken around 20 transactions involving over 70 attractions (Harrison & Bland, 2009). Entire chains have already been changing hands, but some of the current opportunity also has to do with small, family-owned parks begun in the 1970s and 1980s. The original owner retires and the family puts the property on the market. Private equity investors active in European parks acquisitions include Hermes, Palomon, Dubai International Capital (DIC), Advent, Blackstone and Compagnie des Alpes/ Grevin et Cie, among others. Chains that have recently changed ownership include Six Flags Europe, the Tussauds Group, StarParks, Legoland Parks and Parques Reunidos (TEA/ERA, 2008).

Table 7 *Consolidation of parks (from Harrison & Bland, 2009)*

	2001		2008	
	Revenue (m)	*No. of sites*	*Revenue (m)*	*No. of sites*
Disneyland Resort Paris	986	1	1310	2
Merlin Entertainments	40	20	830	57
Parques Reunidos	58	10	509	67
Grevin et Cie	58	7	226	20
Aspro Ocio	44	19	122	39
	200	56	1687	176

There are two types of companies that own multiple theme parks: chains and media conglomerates. The chains own primarily theme parks; examples include Merlin Entertainments, Busch Entertainment, Six Flags and Compagnie des Alpes. The parks in these chains are often amusement parks; possibly that is because of a lack of specific content. The chains fairly regularly licence content for theming attractions or the park. The risk is that when the licence expires all content-related theming has to be removed, as was the case with Movie Park Germany. With the media conglomerates, theme parks are only one way of marketing their content, as in the case of Walt Disney, Universal Studios and Studio 100. Thirty per cent of Disney's total turnover comes from theme parks and adjacent accommodations; for Studio 100 this percentage is forty per cent, whereas for Universal it is only six per cent. Because of the practically guaranteed presence of licensed content, it is possible to carry the theme through into the smallest details (Davis, 2004). Accordingly, parks owned by media conglomerates are often themed parks. New films and characters enable them to update old attractions and find inspiration for new attractions (Wasko, 2001), as was also the case in the takeover of Plopsa Coo and Plopsaland de Panne.

2.3. New attractions

Capital expenditure for European theme and amusement parks is estimated to equate to around 9 percent of industry revenues, a total of €391 million, of which €372 million is estimated to have been spent within Europe (ERA/AECOM 2009). See table 8 for a breakdown per country. The lowest percentage is 7% in France and the highest 15% in Sweden. However, figures can fluctuate rather sharply from one year to another depending on a few individual expenditures. The 15% in Sweden was primarily due to high re-investments in Gröna Lund, which added three new rides to the park in 2008 (Flygande Elefanternaand, Lyktan and Tekopparna). In 2010 there were considerable capital expenditures in The Netherlands because Plopsa opened a new indoor park and the Efteling opened a new wooden coaster. Especially in the smaller countries, the differences in capital expenditure percentages from year to year are thus greater than the similarities.

Table 8 *Capital expenditure estimates by country (from ERA/AECOM, 2009)*

	Capital Expenditure	
	Within Home Country	Rest of Europe
	(€ 000s)	*(€ 000s)*
Austria	3,400	1,200
Belgium	7,100	2,500
Cyprus	30	10
Denmark	23,000	8,200
Finland	3,800	1,400
France	76,900	14,400
Germany	63,900	3,600
Greece	1,000	300
Hungary	200	100
Ireland	40	10
Italy	18,800	1,000
Netherlands	20,200	3,800
Norway	4,100	1,500
Poland	80	30
Portugal	1,600	600
Spain	22,900	4,300
Sweden	20,300	7,300
Switserland	400	100
UK	45,300	8,500
Europe-Wide	**313,050**	**58,850**

Since starting my PhD research in January 2008, no less than 501 new attractions have opened in 158 different parks in Europe. Table 9 shows the breakdown by year and park size. I set the top 100 parks alongside the other parks in Europe. Although the top 100 parks in Europe are responsible for more than 83% of all visitors, in the past three years they have opened only 55.7% (279/501) of all the new attractions. Of the top 100 parks in Europe, in the past three years 79 have invested in one or more new attractions. The same numbers (79) of the other parks have done the same. This means that an average of 58.3% (158/271) of all European parks have invested in new attractions in the past three years, but there are wide differences in the size of the parks. In the top 100 parks, 79% have made capital expenditures, whereas only 46% of the smaller parks have done so. More than half of the smaller parks, in other words, have not invested in new attractions in the past three years. Moreover, the table below shows that the parks that have made capital expenditures in new attractions in the past three years have added an average of 3.2 (501/158) new attractions to their parks. For the top 100 parks, this figure stands at 3.5 and for the smaller parks just 2.8. In essence, what this comes down to is that (1) in absolute and relative terms, in the past three years more smaller parks have not invested in a new attraction and (2) that the smaller parks that have invested in new attractions have, in absolute and relative terms, invested in fewer attractions than the top 100 parks have done.

Table 9 *New attractions per year according to park size (from author's own research)*

	# Parks	2008 Park	2008 Attr.	2009 Park	2009 Attr.	2010 Park	2010 Attr.	Total Park	Total Attr.
Top 100	100	46	86	57	94	57	99	79	279
Misc.	171	32	65	46	99	43	58	79	222
Total	**271**	**78**	**151**	**103**	**193**	**100**	**157**	**158**	**501**

It is also worth noting that the crisis year 2009 was the year with the most new attractions opened by the largest number of parks. However, capital expenditures are often planned far in advance and there was no hint of a financial crisis at the time the contracts were signed.

2.3.1. New attractions per country

If we look at the numbers per country, the results are those summarised in Table 10. Most of the new attractions since 2008 were built in France - 105 attractions in all. This is 21% of the total number of new attractions in the period in question. Germany comes in second place with 94 new attractions (18.8%), followed by The Netherlands with 57 new attractions (11.4%), the United Kingdom with 56 new attractions (11.2%) and Italy with 55 new attractions (11%). The numbers for The Netherlands and Italy, however, are influenced by the fact that a new park was opened in each of these countries in this period, Plopsa Coevorden in The Netherlands (2010) and Miragica in Italy (2009). Without these two new parks the United Kingdom would have come in third place behind France and Germany.

Table 10 *Number and percentage of new attractions per country (from author's own research)*

Country	Number of new attractions	Percentage
Austria	19	3.8
Belgium	21	4.2
Denmark	34	6.8
Finland	11	2.2
France	105	21.0
Germany	94	18.8
Hungary	3	0.6
Italy	55	11.0
Netherlands	57	11.4
Norway	7	1.4
Poland	2	0.4
Portugal	1	0.2
Russia	5	1.0
Spain	11	2.2
Sweden	18	3.6
Switzerland	2	0.4
United Kingdom	56	11.2
Total	**501**	**100**

2.3.2. Categorising attractions

At this time there is no unequivocal, universally-accepted categorisation for attractions. The categories used at present in academic and professional literature are neither exclusive nor exhaustive. This is also true of the categories used by fan sites, suppliers and industry associations. One may even wonder whether it will be possible in future to put together such a list; the innovative character of the industry means that most new attractions are quite unique. The combined composition of the Flying Dutchman is a clear example of this. This attraction does not fit into any existing category. Nevertheless, it would be useful for this study if a categorisation could be made of a more limited number of attractions. Therefore, in this section, if only to introduce a little order to the chaos, I have come up with seven groups. It would have been easy to add or remove a few. An attempt, initialised and supervised by myself and carried out by Cornelissen (2010), to use factor analysis based on characteristics of attractions to come up with a better categorisation proved unsuccessful. This attempt only resulted in an explained variation of 45%. Within that 45% are five different groups that cannot be reduced to a clear and useful description based on general industry knowledge.

In the first instance I made a distinction based on origin. This means that attractions are given the name of the first person to build such an attraction. An example is the Breakdance. This attraction was developed in 1985 by the manufacturer HUSS, and since that time has been found in many parks and carnivals. The name is taken from the dance because the movement of the quickly turning cars resembles that of breakdancers. Generally the decoration follows this theme with dancers and singers on the rear panels. The original concept was by HUSS, but due to its popularity the attraction was widely copied by other manufacturers with small modifications. Examples include Blade Runner (Safeco), Magic Dance (Top Fun), Star Dancer (Nauta Bussink), Crazy Dance (Fabbri) and Break Dance (Sobema). Currently HUSS has three Breakdance models, the only difference being size. This method of categorising initially led to 120 kinds of attractions. These 120 attraction types were eventually pared down to seven categories. This was achieved on the basis of equivalency and frequency distribution, with one of the conditions being that the remainder category could not contain more than 10% of the total number of attractions. The notion of equivalency must be given a wide interpretation, as can be seen from the overview below. Table 11 shows the division into seven categories, as well as the frequency distribution of all 501 new attractions divided into these seven categories.

Table 11 *Division of new attractions in Europe into main categories (from author's own research)*

Category	Number of attractions	Percentage
Roller coaster	102	20.4
Water ride	40	8.0
Family ride	176	35.1
Kids' ride	60	12.0
Flat ride	50	10.0
3D/4D-show/simulator	37	7.4
Miscellaneous	36	7.2
Total	**501**	**100**

The category that has seen the highest number of new attractions in the past three years is the family rides. More than a third of all new attractions fall into this category. However, if we put roller coasters, flat rides and water rides into a single 'thrill ride' category (a plausible argument could be made for this) this category would be the largest. I did not do that because in the industry, roller coasters are a vital attraction category for a park's image. The same can be said of dark rides, but because fewer than 10 were opened in the past three years, I included them in the Miscellaneous category. One in five of the new attractions in Europe in the past three years were a roller coaster. This category includes relatively simple junior coasters without any form of theming, as well as attractions like Blue Fire (Europa-Park) and Anubis the Ride (Plopsaland), where at least half the capital expenditure went toward theming and staging of the ride. From an experience perspective, this latter type of coasters should be further subdivided to identify dark rides, mad houses and e.g. ghost houses. Nevertheless, this was not done for the reasons discussed above.

2.3.2.1. Categories per country

Table 12 shows a breakdown of the seven categories by country. In the past three years the most family rides were opened in France (48), the most roller coasters in the United Kingdom (18) and the most kids' rides in Germany (16). The number of family rides opened in France was also high in relative terms. In the past three years, 21% of all new attractions were opened in France; in terms of family rides, however, this figure is more than 27%. In contrast, roller coasters and other attractions are underrepresented in France. About 19% of all new attractions in Europe in the past three years were opened in Germany. Kids' rides scored above average with around 27%, while flat rides were distinctly below average with 6%. In the United Kingdom the situation is exactly the opposite. That country is responsible for more than 11% of all new attractions in Europe in the past three years. Family rides and kids' rides score well below average with scarcely 7% and 5% respectively, while flat rides and roller coasters both score well above average with about 18%. In The Netherlands, it is primarily the relatively high scores for family rides and kids' rides that stand out.

Table 12 *Attraction type per country (from author's own research)*

	Coaster	Water ride	Family ride	Kids ride	Flat ride	3D/4D-show/ simulator	Misc.	Total
Austria	2	1	8	0	4	2	2	19
Belgium	1	2	10	1	1	1	5	21
Denmark	7	3	8	5	3	4	4	34
Finland	4	0	4	1	2	0	0	11
France	13	9	48	15	10	7	3	105
Germany	15	9	35	16	3	8	8	94
Hungary	2	0	0	0	1	0	0	3
Italy	12	6	14	8	6	5	4	55
Netherlands	8	3	27	10	4	2	3	57
Norway	0	0	2	0	2	0	3	7
Poland	2	0	0	0	0	0	0	2
Portugal	1	0	0	0	0	0	0	1
Russia	5	0	0	0	0	0	0	5
Spain	3	1	1	1	2	3	0	11
Sweden	8	0	7	0	3	0	0	18
Switzerland	1	1	0	0	0	0	0	2
United Kingdom	18	5	12	3	9	5	4	56
Total	**102**	**40**	**176**	**60**	**50**	**37**	**36**	**501**

Despite the limitations of categorisation, this analysis shows that there are relatively wide differences between the European countries with regard to capital expenditure in new attractions. Each country has its own theme park culture, which is clear from the parks' capital expenditure policy. This underscores the importance of a contextual approach to the capital expenditure issue with regard to new attractions.

2.3.2.2. Categories by year

In table 13, I have broken the data down according to when the attractions were built.

Table 13 *Attraction type broken down by year opened (from author's own research)*

	2008		2009		2010		
	Number	Freq.	Number	Freq.	Number	Freq.	Total
Coaster	27	17.9	40	20.7	35	22.3	102
Water ride	10	6.6	18	9.3	12	7.6	40
Family ride	69	45.7	59	30.6	48	30.6	176
Kids' ride	14	9.3	28	14.5	18	11.5	60
Flat ride	22	14.6	17	8.8	11	7.0	50
3D/4D- show/ simulator	4	2.6	15	7.8	18	11.5	37
Misc.	5	3.3	16	8.3	15	9.6	36
Total	**151**	**100**	**193**	**100**	**157**	**100**	**501**

Although a time period of three years is, of course, too short to be able to address trends and developments, one aspect does stand out. The most remarkable point shown in the above table is the large number of 3D/4D shows/simulators in the past two years. The total category comprises only 7.4% overall, but it is clear that tremendous growth has been taking place: from 2.6% in 2008 to 11.5% in 2010. At the European Attraction Shows in Amsterdam (2009) and Rome (2010), and the IAAPA Expos in Las Vegas (2009) and Orlando (2010) this was very clearly observable. There are many up-and-coming suppliers in this area and the interest in these attractions is growing quickly (IAAPA, 2007b, 2008, 2009, 2010; IAAPA Europe, 2008, 2009, 2010). With the success of *Avatar* as the first real 3D-film outside the theme park market, the rise of 3D/4D seems to have made a new start in our industry as well. In chapter 7, I will return to the 3D/4D film *PandaVision* in more detail. In that chapter I will endeavour to find an explanation for the disappointing results of this attraction for the visitor numbers at the Efteling.

As for the rest, caution is needed in the interpretation of table 13. In relative terms and in actual numbers, flat rides have diminished by half in the past three years, while in the same period the 'miscellaneous' category has nearly tripled; but both circumstances could be temporary in nature. We need more historical data to draw any well-founded conclusions.

2.4. Trends in the European theme park market

Around the world the attractions industry does not have an easily accessible or central source of data about trends and markets (Stevens, 2000). This section, therefore, will primarily be based on my own observations and interpretations from conversations with industry experts. Where possible, support will be sought in academic literature. The references, thus, are not intended as a source for the concrete trend under discussion, but for the more abstract application (in the tourism market).

In line with the arguments of Anton Clavé (2007), the process of development in theme parks must be seen in a scenario of the transformation of the role of leisure in society, which may, in summary, be characterized by:

1. A new value of free time as a central component of contemporary developed society
2. The dominance of consumption as a fundamental element of leisure in developed societies
3. The leadership of a few, large leisure enterprises on a worldwide scale with enormous financial capacity and technological and telematic possibilities.
4. The diversification of recreational content
5. The incorporation of issues related to leisure into all facets of life
6. Consumers' acceptance of high components of theatrical authenticity in the consumption of recreational products
7. The demand for high levels of comfort, safety and security and environmental aesthetics in leisure products and facilities

Additionally, the development of theme parks -just as the development of leisure- must be seen in the broader context of general developments relating to consumption and society. Trends that are visible in the industry are generally set in motion by visionary theme park managers as a reaction to (perceived) demographic, economic, social/cultural, technological, ecological, and political/legal changes. One characteristic of this is the changed, more fragmented markets, partly because the better-educated, more experienced and empowered consumer has become hastier and more critical in

his selection behaviour. The importance of experience and conspicuous consumption has increased still further and with it the importance of branding (Sociaal en Cultureel Planbureau, 2001). In the growing quest for attractive experiences, we are less concerned about the once vaunted space/time and social/cultural orders (Mommaas et al., 2000). In combination with increased competition, by an externally stretched and internally more differentiated and (at the same time) more mobile field of leisure activities, both in the space/time sense and in terms of content, theme parks have to work harder to attain and maintain a favourable market position. The leisure market is commercialised and the result of the process of commercialising leisure time is, therefore, the creation of spaces of consumerism that hinge on commercial entertainment facilities, like theme parks. These facilities have been considered by authors like Ritzer (1999) as some of the new 'cathedrals of consumption', at which 'consumer religion' is practiced. Mommaas (2003) summarises the developments in the leisure industry in terms of 'expansion, condensation and interweaving'. His interweaving model is illustrated in figure 1.

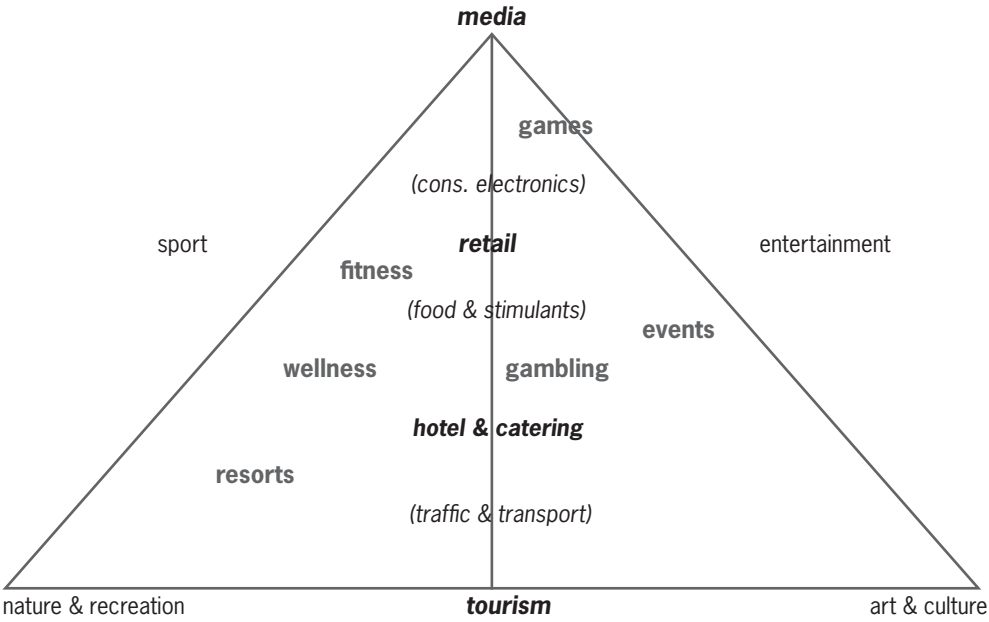

Figure 1 *Interweaving model leisure industry (from Mommaas, 2003)*

Below is an overview of the specific way in which the above abstract developments are visible in the theme park market.

2.4.1. Mergers (takeovers by chains)

In recent years, there has been an enormous wave of takeovers by the chains Merlin Entertainments, Parque Reunidos, Compagnie des Alpes (Grevin) and Aspro Ocio, and the end does not yet seem to be in sight (Harrison & Bland, 2009). The reason for these takeovers is, on the one hand, the urge of the chains in question to engage in further expansion and spreading the risk of their business (Hesmondhalgh, 2007). On the other hand, because of the potential in the European market due to the fact that many attraction parks in Europe are still family-owned (Anton Clavé, 2007), these businesses are turning to

horizontal and vertical integration, internationalisation and multisector and multimedia integration. This latter term means that they buy into other related areas of cultural industry production to ensure cross promotion. These integrations lead to further professionalization of the industry, but bring with them as a possible undesired side effect a McDonaldization of management processes throughout the industry. The chains in question implement proven management techniques, including efficiency, calculability, predictability and control through nonhuman technology (Ritzer, 1993), at all their parks and in their wake competing parks are forced to increase the profitability of their business as well. This could be achieved in the competing parks via the route of long-term increases in turnover (Kotler & Keller, 2006), but the temptation to achieve this end instead by means of short-term cost reduction is always present. In a general business environment where the importance of quarterly figures is on the increase (Ambler, 2003), the temptation to go for the penny-wise, pound-foolish strategy is understandable. On the one hand, the family-owned character of the European market in attraction parks gives the expectation that the trend towards rationalisation will not get very far, as other factors besides short-term profitability also play a significant role in the business operations of these parks, but on the other hand the possibility of takeovers increases the chance that this will be the case after all.

2.4.2. Professionalization

With the arrival of Disney in Europe in the early 1990s, a move towards professionalization in European parks was begun; this move was accelerated by the trends in integration and chain formation described above. Parks found themselves obliged to raise their product and service levels to the new level of expectations created by Disney. This development caused a positive upward spiral of quality improvement in the industry, and for competitive reasons parks set themselves ever higher standards to live up to. Parks invested heavily in new attractions, entertainment, hospitality and merchandise facilities, training for staff and management, maintenance and landscaping, and safety. This gave them an improved position in the industry, but also served to noticeably improve the always-important external competitive position with other alternatives in the leisure market. At this time professionalization is expressed especially in offerings aimed at the experienced visitor (Mitrašinovic, 2006; Pine & Gilmore, 1998, 1999). An experience must be guaranteed (Mommaas et al., 2000) and the end of this trend is not yet in sight. It is not just the attractions and entertainment that must be memorable, but the food and beverages as well. Where possible, the link to the park's own characters and content is made to add substance to the experience, for example selling waffles in the shape of Mickey Mouse ears or pancakes with the Pardoes logo on them. In many cases, we also see that the environment in which the food and beverages are served has undergone a transformation into carefully-staged servicescapes. We also see that many parks are still working on improving the so-called dissatisfiers of a park visit, including sprucing up gardens, paths and signage (Milman, 2009), as at Attractiepark Slagharen (The Netherlands) which in recent years has poured more than 20 million euros into total quality improvement of the park. The importance of waiting in queues is increasingly being identified as a negative brand asset and tackled by the introduction of fast passes, single riders' lines, assisting queueing guests, waiting time information systems and waiting queue experience. By these means the external competitive position of European parks is being significantly improved, because the perceived queuing for attraction parks is still the greatest annoyance to potential visitors. Improvement in this area might, in line with the Blue Ocean vision (Kim & Mauborgne, 2005), perhaps be of greater influence on visitor numbers than investment in new attractions.

2.4.3. Park renewal

This dissertation centres on the influence of new attractions on the performance of parks. In the literature we often encounter the claim that capital expenditures in new attractions are constantly rising and a rat race between parks has begun. New attractions are said to be higher, faster and more intense. The analysis in section 2.3, in which the new attractions of the past three years are examined, does not reflect this specific situation. Faster and higher attractions are being built, but that is certainly not the total picture for the industry. These are just the attractions that garner more attention in the press because of their greater news value. Of the 501 new attractions built in Europe since 2008, only a handful can be described as 'higher, more intense, wilder.' The Plopsa parks, for instance, have clearly indicated that they make a conscious choice for proven technology to prevent safety and other problems with attractions. This does not mean that a great deal of experimentation is not going on within the industry, with technologies such as virtual and augmented reality, tracking – and trackless systems and countless other digital, interactive and technological possibilities (Cooper, Fletcher, Fyall, Gilbert & Wanhill, 2005; Rossmann, 2009). Parks are, after all, part of the cultural and creative industries and therefore will continue to explore the possibilities in order to offer guests a memorable experience. Moreover, the way in which the applications take place may generally be described as very innovative. Anubis, the ride in Plopsaland de Panne, is a good example. The ride system is not new, but the way in which the attraction is designed is unique in Europe. In addition to park renewal in the area of attractions, we see that parks are also widening the range of food and beverage facilities, entertainment and retail. In the area of food & beverage, this is recognisable in the introduction of donner kebab outlets, healthy food, regional products and increased exclusivity, among other things. Tivoli Gardens now boasts two restaurants with a Michelin Star and Astrid Lindgren park in Sweden offers only products that are grown and produced in the immediate vicinity of the park. In contrast to most rides (except for 3D films), entertainment is more readily changed. In 2010, MoviePark Germany added no new attractions to its park but invested in "X-Men Revenge: The Ultimate Action Show". In this way parks can encourage earlier and more intense repeat visits. Retail is increasingly seen as an important source of secondary spending; accordingly, we see shops being redecorated or sometimes subjected to a complete metamorphosis. Combined with park-wide season-lengthening strategies, we see e.g. temporary Christmas shops and special Halloween outlets.

2.4.4. Disneyization

One trend that is clearly observable is what Bryman (1999a) with a wink at Ritzer (1993) calls Disneyization: "the process by which the principles of the Disney theme parks (theming, hybrid consumption, merchandising and performative labour) are coming to dominate more and more sectors of American society as well as the rest of the world" (p.26). Parks devote more and more attention to theming, sometimes just in a fairly basic decorative form, but more often these days also in the form of detailed micro-theming (Cornelis, 2011 forthcoming; Lukas, 2007). Plain attractions, hospitality and merchandise outlets are still developed, but in the past decade there has been a clear trend to provide these attractions and outlets with a thematic identity. The hybrid forms of consumption and interweaving with the media world (Kiel 2002; Mommaas et al., 2000; Rossmann, 2009) are visible, among other things, in the Plopsa parks based on Studio100, De Efteling with its own TV content and MoviePark Germany. But even with smaller parks like Toverland in Sevenum, the interweaving of attractions, hospitality, merchandise, walking areas and play areas is clearly observable. Although Troy is primarily known as Toverland's wooden coaster, visitors indicate that this attraction has really opened a whole

new phase in the park's history, characterised by the aforementioned themed interweaving. The Flying Dutchman discussed above is another example that clearly shows that traditional compartmentalised thinking is beginning to give way to a new method of business operations. Moreover, more strategic alliances are being made (Cooper et al, 2005; Cornelis, 2010c) and the importance of branding (Keller, 2003b) is on the increase. The related secondary spending in parks (such as the sale of on-ride films, photos, tattoos, character drawings and merchandise) is increasing with it. It is primarily the theme parks that show the strongest growth in this area, although amusement parks appear to be realising that attractive financial possibilities may await them also. The last principle sketched out by Bryman is so-called performative/emotional labour. The high investments in staff training are made visible in a growing customer-centeredness in the industry. The room for improvement still visible in many parks will probably be quickly dealt with in the near future, because the revenues of performative labour manifest themselves in the form of higher guest satisfaction, more loyalty and as a result, higher primary and secondary spending.

2.4.5. Uniqueness and identity

After the failure of the American parks that tried in the 1990s and at the beginning of the new millennium to duplicate their successful strategies in Europe, parks began to understand that local identity was very important for success in Europe. As a reaction to the homogenising principles of Disneyization and McDonaldization, we see that many parks are seeking uniqueness and a renewed identity (Boyd, 2008; Cornelis, 2010d; Feifan Xie & Wall, 2008; Gilmore & Pine, 2007; Hall, 2008). This dialectic is expressed at parks such as Erlebnisspark Tripsdrill and Puy-de-Fou, both of which are strongly focused on maintaining their distinctive position. They are trying from their own strengths to appeal to the deep-seated motives and drivers of the visitor (Leask, 2003). The Efteling has chosen to be the guardian of the fairy tale and appears to primarily be reviving the regional Dutch fairy tales. Many other parks also appear to have determined their points of parities (Keller 2003b) by means of a strategic canvas (Kim & Mauborgne, 2005), and on what strong, favourable and unique brand associations a point of difference can be realised. The investments in Flug von Novgorad in Hansa Park, for instance, fit perfectly into the brand concept of this park. The vision, mission and consumer expectations of this park relate to the link to Hanseatic history and the park has clearly gone back to its original roots in order to give itself a distinctive position in the mind of the consumer.

2.4.6. Resort development

In emulation of Disneyland Resort Paris, many parks in Europe now have their own lodging accommodation. This is generally in the form of themed hotels, but we also see other forms such as campgrounds, treehouses, log cabins and bungalow parks. At present there are nearly 40 park-related hotels in Europe (ERA/AECOM, 2009). In all cases, parks do their best to continue the immersion and contra structure of the park in the hotel accommodation. The aim of all these activities is to increase the catchment area of the parks and also to offer the visitor a longer stay and the guarantee of a bigger experience (Gunn, 1988 in Stevens 2003). After all, the longer a guest is immersed in the contra structure of the park, the higher the profits. (Besides Disney) Europa-Park and PortAventura are the undisputed leaders in this area with both four micro themed, stylish four-star hotels; for Europa-Park there is even a fifth currently under construction. As a part of the resort concept, parks are also opening second gates and theatres so that the attraction value for the visitor is sufficiently high to justify a multi-day stay, and at the same time make the product more interesting for the organisation of events

and the business market. Examples are the Sealife and Legoland Discovery Centers in or near several Merlin parks, but also water parks like the Caribe Aquatic Water Park by PortAventura in Spain or Faarup Aquapark and Sommerland in Denmark. Sometimes there is even an integration of a water park and hotel, such as Alton Towers' splendid Splash Landing Hotel, or in a somewhat different setting the partnership between Plopsa Coevorden and Center Parcs. Although the resort development as such can have an attraction value for the consumer, and therefore for diversification reasons can be financially worthwhile, for many parks it remains a strategy to bring new visitors in contact with the primary product, the park itself. This begs the question whether the attraction value of the park is sufficient to convince a guest from a distant region to spend the night. This is even more true if the resort is the only tourism/recreational marker in the area in question.

2.4.7. Season lengthening and spreading

One of the intended and desired side effects of the development towards resorts is the lengthening of the season -and therefore the period in which the capital invested in the park can be profitable. After all, theme parks are an extremely capital-intensive business operation and the cash flow for almost all parks in Europe is very unevenly spread over the year (Swarbrooke, 2002). Even parks that are not being developed as resorts are trying to lengthen their season (Goulding, 2003, 2008; Stevens, 2003). Because of the capital-intensive character of parks, it is important to spread the investment over as many days of the year as possible. By keeping the park open during the winter months, visitor numbers can be increased, but also spread out. Winter opening leads to an increase in visitor numbers, but at the same time has a cannibalising effect on a portion of existing visitors. The advantage of this is that it addresses one of the negative aspects of attraction parks (perception of crowdedness and waiting times). Combined with the serious attempts to address queuing problems (Goulding, 2008) by means of technological devices and other methods, this could in time lead to further growth in visitor numbers, which might also be better spread over the season. To lengthen the season, parks are actively trying to add value to so-called 'shoulder months' (with e.g. Halloween activities) and facilities are being winterised. This means more heated indoor facilities, such as restaurants, and covered attractions, as well as complete indoor play areas (Stevens, 2003). Whether parks will succeed in being open 365 days a year like Disneyland Resort Paris, remains to be seen. The influence of the weather on leisure park visiting is considerable, and the influences of climate change are not easy to interpret. The key to successful year-round operation will lie in the attraction power of what is being offered. Moreover, given the importance of school holidays and weekends for the industry, this does not need to be limited to the primary target group of families with children, but will also need to be made attractive for a so-called Blue Ocean or uncontested market potential, such as seniors for instance (Kim & Mauborgne, 2005). If the visitor numbers needed to break even every day are too far removed from the design day, it is doubtful that the park's attraction power is sufficiently great. The presence of other guests often has a positive influence on the park experience and guest satisfaction (Zeithaml, Bitner & Gremler 2009). The challenge parks face at the moment is finding the right balance between spreading the guests over the season such that the invested capital can be as profitable as possible, while keeping guest satisfaction high.

2.4.8. More aggressive marketing

A much-used form of marketing in the attraction park industry is the so-called joint promotion. Parks collaborate with countless other brands to give the product extra added value, realise more sales points and achieve a better position in the mind of the consumer (see also chapter 6). Tickets are often sold in combination with other items at a reduced rate. Especially in 2009 and 2010, we have seen a sharp increase in heavy price promotion and other active price strategies, such as BOGO (buy one, get one), yield management, Friday afternoon rates, family tickets, discount on second visit, varied subscription structures and even all-in-one concepts (Poon, 1989 in Cooper et al., 2005). Although active price strategies can give the industry a positive impulse, a warning about price wars would not be inappropriate here, because they take the entire market into a downward spiral of limited investment possibilities (Poiesz & Van Raaij, 2002) and therefore only produce losers in the long run. The price elasticity of most attraction parks is, after all, characterised by a strong short-term reaction followed by a moderate negative effect in the longer term. Five more visitors today, in the long term 15 fewer (Cornelis, 2010d). With a management assessment system in many cases focused on short-term effects, a heterogeneous oligopolistic market like that of theme parks faces a serious challenge. Fortunately, the European attraction park industry is, in this respect, still largely independent, and thinking in terms of financial quarters has scarcely gained a foothold. Hopefully the BOGO trend of the past few years is merely a product of the economic downturn, and parks will be willing and able to reverse it at the first sign of economic recovery. The application of marketing 2.0 techniques appears to follow the same trend as in other product categories. In recent years we have seen more and more parks using social and mobile media to bring their message to the public and at the same time to forge a stronger relationship with the public (Cornelis, 2010d). Most parks are now on Facebook and Hyves, and Twitter is beginning to make an impact. These media are currently mostly employed for sender content, but this appears inherent to the novelty of the medium. Where we see websites making a transformation in the direction of 2.0, I expect that we will also quickly enter into a new phase with regard to social media. Aided by Google Streetview and other technological innovators, it will not be long before the interweaving of the symbolic and physical worlds of leisure will begin to take on serious form. Other noticeable marketing trends include a movement towards regional marketing, the use of the park as a set for TV programmes (whether or not produced by the park), and the use of new technical sales channels (Rossmann, 2009). Also noticeable is the simultaneous target group expansion and contraction. Parks will more explicitly focus on extended families, but also other target groups like seniors and the immigrant community. This will be seen not only in the marketing communication but also in modification of the product, such as higher quality in the restaurants and offering e.g. modified meal options. Target groups are approached in a more fragmented manner (Cooper et al., 2005) and there is emerging attention for the motives and drivers of the new visitor (Voase, 2003). Customer Relationship Management is slowly beginning to gain momentum here, first simply in the form of special attention for subscription holders, but gradually also other parties are being approached through CRM applications. This is being expressed in the target group-oriented approach in order to increase the urgency to visit by means of organising many specific events.

2.4.9. Social responsibility

A glance at the mission statements of different parks clearly shows that the industry has people's best interests at heart. The Efteling has claimed for years to provide the best childhood memories. This may sound pretentious, as ultimately these are provided by a child's parents, family and friends (by taking the child to the Efteling), but the obligation the park imposes on itself in this shows that the park wants to contribute to a more beautiful world. If we look at the rules of conduct endorsed by IAAPA members, we see that many of the activities are indeed aimed at offering a carefree day out that is also sustainable and safe. During the European Attraction Show organised annually by IAAPA Europe, increasing attention is being paid to subjects like going green, sustainability (Cooper et al., 2005; Garrod, 2008), safety, healthy food, edutainment for the youth (Ritchie, Carr & Cooper, 2008) and (for example) the economic and social impact of our industry (Garrod, 2008). Opportunities for development for the often less educated and poorly paid staff are addressed in leadership sessions (Cooper et al., 2005; Watson & McCracken, 2008) and there are special education packages in this area. The era when parks merely had a short-term view focused on the economic results of the park is behind us. In addition to profit, there is also increasing attention for people and planet. In 2010 a special issue of WHATT (Milman, Okumus & Dickson, 2010) was even dedicated to the question 'how far do theme parks and attractions contribute to social and economic sustainability of destinations?' IAAPA (Europe) plays a prominent and leading role in this development. The various committees and the advisory board are composed of a varied and representative portion of the European park world, which feels responsible for raising the general quality and position of the industry. In 2010 more than 1000 people visited the various education sessions during the EAS in Rome. Although the 'going green' session was one of the sessions with the lowest attendance of the educational programme, it is noticeable that the number of visitors to this programme shows a strong positive tendency as compared with previous years. In addition to the direction and agenda setting from IAAPA Europe, parks are also very active on an independent basis with tackling traffic problems and noise pollution and building a relationship with the surrounding community from a perspective of mutual understanding.

In summary, we can say that trends in the attraction park market include increasing takeovers, more use of theming and performative labour, hybrid consumption areas, an interweaving between the physical and symbolic world of leisure, the increasing importance of branding and merchandise, rationalisation processes such as efficiency, calculability, controllability and predictability, resort development, extending and spreading the season, developments toward second gates, a quest for uniqueness, identity and authenticity, more interest in events and the business market, more aggressive marketing campaigns in the form of yield management and other pricing systems, more use of technological marketing opportunities like social and new media, expansion and contraction of the target group, expansion of F&B concepts and more attention for frequently-changeable shows and entertainment programmes, sustainability and social position in the industry and investment/ overinvestment in new attractions.

Chapter 3 *A management perspective on the impact of new attractions*

According to the latest industry attendance report by Themed Entertainment Association (TEA) and Economics Research Associates (ERA) theme park Efteling in the Netherlands had a flat season in 2008 (TEA/ERA, 2009). The number of visitors to the park did not increase compared to 2007 despite a major investment in the hybrid, new Flying Dutchman ride. In 2007 the park welcomed close to 3.2 million visitors and in 2008 the same number of people passed through the main gate. Does this mean that the new attraction did not have any impact on the number of visitors coming to the park? We do not think so, but frankly, it is difficult to ascertain and the TEA/ERA report does not help us either in coming to a conclusion about this. The specific impact of adding a new attraction to a theme park is a very important, but yet still unknown, issue for theme park managers. The industry invests millions of euros in new attractions and other major improvements every year (EuroAmusement Professional, 2009; Peck, 2009; PricewaterhouseCoopers, 2007) with the hope and expectation that the number of visitors will increase, or at least remain stable. In this article the impact of new attractions for European theme parks will be presented from a management perspective.

3.1. The impact of new attractions

The TEA/ERA report gives plausible explanations for the 2008 attendance numbers for the top 20 US theme parks and top 15 US water parks; without being specific about the impact of new attractions. "Cedar Point (Sandusky, Ohio) spent over $5 million in capital improvements in 2008, including the opening of Planet Snoopy, new stage shows, and a refurbished Sandcastle Suites Hotel. They also reduced their ticket prices back to the 2005 level. These decisions seem to be the major cause for the 2.5% increase in the number of visitors compared to 2007" (p.6). Information about and a possible explanation of the European figures is not provided. For the European market, the report limits itself to mentioning the visitor numbers for the 20 largest parks and giving a general impression of the 2008 season. Figures are not provided for the smaller and middle-sized parks and are therefore difficult to ascertain. Despite this, the above-mentioned TEA/ERA report is greeted annually with great interest, because it is one of the few reliable reports about visitor numbers. "ERA obtains the figures to create the report through a variety of sources, including statistics furnished directly by the operators, historical numbers, financial reports, the investment banking community and local tourism organizations, among others" (TEA/ERA, 2009, p.13).

Through the absence of other reliable information there is the possibility that managers of theme parks, large or small, will use the figures too much as absolute truths and attribute causal links where they do not belong. According to Cornelis (2009) "the industry's most accepted method of determining a new attraction's effect on visitor numbers is to simply compare attendance with the season before it was introduced" (p.34). Another better method which is used frequently is looking for correlations between new attractions and visitor numbers. This method is used by ERA and provides interesting insights. Yet we should also be careful in this because a correlation still does not mean a causal link. Other effects have to be excluded. "The ERA models suggest that reinvestment probably has a stronger correlation with attendance than does economy. When parks reinvest in a major new ride or show or zone, the increase in attendance tends to be in the high single digits, whereas a recession impacts in the low single digits" (TEA/ERA, 2009, p.3). The extent to which correlational research has been checked for numerous other relevant factors is not known. Given the large amount of data which the ERA has

at their disposal, however, it cannot be ruled out that they have more knowledge than they are publicly communicating.

Cornelis (2008)[2] presented the first econometric research into the influence of new attractions on the visitor numbers of a European theme park. For this, he used the dynamic error correction model and checked the influence of a new attraction for matters such as temperature, rainfall, travelling costs, ticket price, weekend and holidays, opening hours, opening of new shows and special events (such as Halloween). The marketing budget could not be included in his model, because this data was not available on a daily level. The latter is naturally a deficiency, because we assume that the marketing budget is an important factor in the explanation of new attractions. In more extensive research, in which the same error correction model was used, Cornelis (2010a) demonstrated that differences exist in the influence of new attractions between various theme parks on the one hand and between attractions within the same park on the other. The lowest average effect of a new attraction in the year of introduction was 4% at park A and the highest average effect was more than 10% at park D. Conversely, park D had the largest spread of effects. The attraction to score the highest in this park demonstrated an increase of 23% in visitor numbers in the year it opened. The attraction to score the lowest in the year in question only had 2% extra visitors. Although the econometric model by Cornelis (2008) is to be preferred over the other methods used, it is clear that the use of this method is not without problems. Firstly, it is very difficult to find sufficient parks that are prepared to provide the enormous amount of data on a daily level going back 15 to 20 years. In addition, some relevant data is in any case difficult to retrieve on a daily level or cannot be retrieved and moreover, we encounter the problem of the multicollinearity of data (Cornelis, 2010a).

3.2. A management perspective

Due to the problems as described above, it would be good to employ a number of lines of approach and research methods to gain insight into the influence of new attractions on the visitor numbers of European theme parks. A line of approach which has not been used so far, is asking for the insights of theme park managers. Managers of theme parks have to continually take decisions despite a great deal of uncertainty sometimes existing and through sharing their experience and knowledge of the industry, they could help to decrease this uncertainty for each other. In the setup of the research which is discussed in this article, consideration was taken of the point of departure that the most frequently used method in the theme park industry for establishing the influence of a new attraction was simply comparing the visitor numbers in two subsequent years. This is why this research consists of three phases. Firstly, in a written survey, the general managers from 167 carefully selected theme and amusement parks in Europe were asked for their estimation of the effects of the latest new major investment in a new attraction. In this, questions were asked about the year of the major investment in a new attraction, the presumed effect of the new attraction, the visitor numbers should the investment not have taken place in the year in question, the frequency of major and minor investments, the factors which influence visitor numbers and their relative importance (both on the short as well as the long term), the expectations regarding the developments in the industry and their own relative position in this. The parks which responded were then asked via the telephone and/or e-mail to provide further information about the figures. Finally, in-depth interviews took place with 29 managers of theme and amusement parks in Europe, representing 19 of the participating parks. The latest, most advanced

[2] *This paper is also known as Cornelis (2010e).*

insights of the managers in question were then processed in the results. It appeared that the managers found it extremely difficult to establish what the influence of new attractions was and in the first instance they attributed the percentage difference between the two subsequent years to the new attraction, only then to adjust it (usually downwards) for other variables such as the price, competition, the weather and suchlike. It also appeared that, in response to the question about the effect had no new attraction been opened, most of the respondents would have reconsidered the effect of making an investment.

3.2.1. Participating theme parks

For this research a sample frame was originally composed for nearly 200 theme and amusement parks in Europe. For the composition of the list, use was made of specialist journals, magazines, fan sites, roller coaster data base (www.rcdb.com), ParkScout (2007, 2008), IAAPA summaries and lists of national associations (such as *Club van Elf, Toerned, Recron* etc.). The criteria which were used to draw up this list were the annual visitor numbers at a minimum of 200,000, a varied provision of attractions and/or shows (which were not exclusively offered indoors) and a fixed ticket price. From the parks selected originally, parks were withdrawn which were part of the Merlin Entertainments Group, Parques Reunidos and Compagnie des Alpes (Grevin). These parks indicated that, as part of company policy, they did not participate in this sort of research. The final sample frame was thus 167 independent theme and amusement parks; this was also the sample survey. Of the 167 parks approached, 56 respondents reacted with usable results, which meant a response percentage of 33.5%.

The sample survey was divided into three categories qua size; namely large parks with annually more than 1 million visitors, middle-sized parks with between 0.5 million and 1 million visitors and the smaller parks with less than 500,000 visitors (but more than 200,000). Determining the size of the parks was not a simple task, because particularly for the smaller and middle-sized parks only limited information was available. For determining the size of the park, use was made of the reports and the information from TEA/ERA (2007-2009), various fan sites (such as rides.nl; themepark.nl), and Camp (1997, 2001), Cliff (2007), O'Brien (1995, 1999, 2000), PricewaterhouseCoopers (2004a, 2004b, 2007, 2008), Richards & Richards (1993, 1997), Stevens (2000) and WilkofskyGruenAssociates (2003). The division of the response can be found in table 14.

Table 14 *Response per country*

Country	Response #	Response %	
Belgium	3	5.8	
Denmark	4	7.1	
Finland	1	1.8	
France	10	17.9	
Germany	9	16.1	
Greece	1	1.8	
Italy	4	7.1	
Netherlands	7	12.5	*
Norway	1	1.8	
Portugal	2	3.6	
Spain	4	7.1	
Sweden	2	3.6	
Switzerland	1	1.8	
United Kingdom	7	12.5	**
Total	**56**	**100**	

** over represented; ** under represented*

The larger parks are slightly over represented in this research (n=12, 21.5% of the response) at the expense of the smaller parks (n=24, 42.8%). Through using personal contacts relatively many larger parks completed the questionnaires. In particular abroad, the author's network is too small at smaller parks for affecting an increase in the response, which is why this distortion occurred. From table 14 it is also clear that the parks in the Netherlands are over represented and the parks from the United Kingdom are somewhat under represented. Combined with the sample frame limitation that no parks from the Merlin Entertainments Group were approached, we have to be careful with generalising the results.

3.3. Results: The importance of new attractions

In a general sense innovation and investing in new products is regarded as the oxygen of brand products (Kapferer, 1997; Swarbrooke, 2002). In the amusement park industry regular investments are made in new attractions and shows (PricewaterhouseCoopers, 2008; Price, Swarbrooke, 2002; TEA/ERA, 2009) and this is regarded by the industry as a necessity (Cornelis, 2010a). To establish what is important about investing in new attractions, the management of the participating parks were asked which factors according to them had the greatest influence on the visitor numbers on the long term as well as the short term. In this research, the long term refers to effects occurring 1 year later and longer; the short term to effects occurring within 1 year. Respondents were asked to select the first three effects in the order of importance from a list of 12 effects. An assessment factor of 3 was ascribed to the most important factor, an assessment factor of 2 to the second most important one and finally an assessment factor of 1 to the third most important one. The individual factor scores were added up together and then divided by the total number of points. The scores, which can be found in table 15, are therefore the percentages of the total number of cases. The list of twelve factors which the respondents could choose from came about through interviews with 20 experts in the area of amusement parks (during the IAAPA, Orlando 2008). The list is complemented with a category 'other',

so that the possibilities for answering were exhaustive. The results will be presented in the following two sections.

Table 15 *Perceived importance of factors (from author's own research)*

Long-term importance			Short-term importance		
	Factor	*%*		*Factor*	*%*
1	*New attraction*	38.7	*1*	*Weather*	35.4
2	*Weather*	12.5	*2*	*New attraction*	28.5
3	*Marketing budget*	12.2	*3*	*Marketing budget*	10.0
4	*Other investments in park*	7.4	*4*	*Entrance fee*	8.1
5	*Entrance fee*	6.3	*5*	*Special events*	7.3
6	*Special events*	5.9	*6*	*New shows/entertainment*	3.8
7	*New shows/entertainment*	4.8	*7*	*Competition*	3.1
8	*Other …*	4.4	*8*	*Disposable income/leisure time*	1.9
9	*Opening new hotel*	4.0	*9*	*Other investments in park*	1.5
10	*Competition*	1.8	*10*	*Opening new hotel*	0.4
11	*Disposable income/leisure time*	1.5	*11*	*Other …*	0.0
12	*Investments in Food & Beverage*	0.5	*12*	*Investments in Food & Beverage*	0.0
	Total	**100**		**Total**	**100**

3.3.1. Long term importance of new attractions

As can be seen from table 15, the major or minor investment in new attractions takes by far the first place when it concerns the perceived influence on visitor numbers for the long term. 'Without regularly investing in new attractions you lose a distinguishing capacity and you'll ultimately become a commodity. You'd then have to compete on the basis of price which would further undermine the distinguishing capacity. For the industry it is good for us to constantly demonstrate our creative, innovative capacity to be able to compete with other alternative choices, such as short-break holidays, visiting shopping malls and suchlike. In our industry it comes down to offering a qualitative, high-class, distinguished product. Visitors want a day out so they can forget all their daily concerns and this will not happen if the products are too much run-of-the-mill. You have to constantly invest in new attractions in order to remain interesting'[3]. It is remarkable that the second place is taken by the unmanageable variable of the weather. Respondents are of the opinion that the weather is one of the most important factors when it concerns visitor numbers on the long term. For the short term we had probably expected this, however, for the long term this is certainly surprising. It appears that the respondents consider the location of the park to be very crucial for attracting visitors. On the one hand this influences the catchment area of the parks, but directly related to this it also influences the climate and thus the weather. So it appears that the weather is, for the long term, sooner regarded as a constant influential factor then as a variable factor. It is only at the third place that we find the marketing budget, followed by other investments in the fourth place and the ticket price in the fifth place. The perceived importance of the marketing budget is nothing in comparison to the perceived importance of investing in new attractions. The effect could however be distorted as the price and investment in new attractions also ought to be regarded as marketing efforts.

[3] *Quotes between inverted commas stem from the informative interviews*

These are now in fact singled out as exceptional. Under the heading other investments in the park the following were frequently mentioned: training the staff (hospitality, friendliness, service), neatness of the park, general quality improvement, infrastructure and green areas. 'Investments in new attractions should only take place at the same time as investing in basic facilities, because a new attraction will only have an effect if the guests feel at home in the park.' It is also striking that the relatively flexible investments in new shows and entertainment can only be found in the seventh place. 'We are of the opinion that new shows and entertainment primarily have an effect on general customer satisfaction and thus indirectly on the visitor numbers. It's thus very important for our company and our industry, but not so much in the sense of direct acquisition.'

3.3.2. Short term importance of new attractions

From table 15 it appears that the weather is considered to be the most important influence on visitor numbers on the short term. 'The 2008 season began very cold and wet, this is immediately reflected in the visitor numbers. Guests then tend to postpone their visits for a while and a postponement often becomes a cancellation: new attraction or not. A lovely, warm and primarily dry summer day is the best for our visitor numbers.' In the second place, we see the influence of investing in new attractions. Managers consider this factor of greater influence on the visitor numbers than the marketing budget and the ticket price. 'You'd rather have a new attraction, but unfortunately that is not always possible. It requires an enormous amount of energy to open a major new attraction. With a small group of people it is always a matter of making compromises as far as time is concerned; that's even without considering the financial aspects. It costs a lot, that's one thing you can certainly be sure of, but what it will produce remains a question. For the time being at least.' Investing in events, shows and other matters in the park also appear to be less relevant for the short term than the factors mentioned above. The parks do not appear to experience many problems from their competitors. 'We always work on the basis of our own strengths.' The same applies to the disposable income and the amount of leisure time. These two factors are experienced as somewhat more important for the visitor numbers on the short term than for the visitor numbers on the long term, but in both cases, their importance is relatively very small.

All in all it can thus be argued that managers of theme parks attach great importance to investing in new attractions. It is considered to be the most influential factor for the visitor numbers on the long term and as the second most influential factor for the visitor numbers on the short term. Should we exclusively look at the manageable factors, then investing in new attractions is viewed as the most important factor in both cases. Investing or not investing in new attractions is thus, both tactically as well as strategically, a very important policy issue.

3.4. Results: The impact of new attractions

The results in relation to the impact of new attractions will be presented in two different sections. In the first part the results will be divided into a number of general factors and ones specific to the park. After the general effects have first been discussed, the effects will then be divided into the frequency of the investments and how recently they took place, and the size of the park.

3.4.1. General results

In the research, it was first asked in which year the last major investment in a new attraction took place. The interpretation of what a major investment is was up to the management of the park itself, because this differed for each park. For a small park that could be an investment of a few tens of thousands of euros, whereas a number of larger parks make investments of a few million in the park annually, yet this is not considered to be a major investment. The question was also asked about how many years the park in question made major investments in new attractions and about how many years they made minor investments in new attractions. In relation to the last major investment in a new attraction it was asked what the influence on the visitors numbers was in terms of an increase or decrease in percent. It was also asked what the effect on the visitor numbers would have been perceived to be should a major investment had not had not taken place in the year in question.

Table 16 *Most recent year of major investment according to size of park (from author's own research)*

		Size of park in two groups*		
		Large parks	*All other parks*	*Total*
Most recent year 2008 and before	*2008*	31.2%	59.0%	50.9%
	Before 2008	68.8%	41.0%	49.1%
	Total	**100.0%**	**100.0%**	**100.0%**

** Pearson Chi-square value 3.489 (0 cells have expected count less than 5). The minimum expected count is 7.85); df = 1; Asymp. Sig. (2-sided) 0.062.*

As can been seen in table 16, more than half of the parks invested in a new attraction in 2008 and the rest did so before 2008. This appears to be a high percentage, but as proposed the definition of a major investment was determined by the parks themselves. For the larger parks, the percentage of investments in 2008 was more than 31%, whereas for the other parks this percentage amounted to nearly double this figure (59%). In general, larger parks made major investments in new attractions more recently nearly half as often than the other parks. However, the difference is only marginally significant (Pearson Chi-square = 0.062; df = 1).

Table 17 *Frequency of investment in new attractions (from author's own research)*

	Major investment	Minor investment	Major investment (in combination with minor investment every year)
Every year	14.3%	82.6%	15.8%
Every two years	17.9%	6.5%	18.4%
Every three years	39.3%	6.5%	36.8%
Every four years	14.3%	4.4%	15.8%
Every five years	8.9%	-	13.2%
Less than every five years	5.3%	-	-
Total	**100%**	**100%**	**100%**

In response to the question about how frequently investments were made in new attractions (table 17), 14.3% of the parks said they did so every year, 17.9% of the parks did so every two years, 39.3% every three years and 28.6% less than once in three years. As expected, minor investments in new attractions occur more frequently: the percentages of which amount to 82.6% every year, 6.5% every two years, 6.5% every three years and 4.3% less than once in three years. The most frequently occurring combination of investments (table 17) was a major investment once in the three years and a minor investment every year (36.8% of all cases) followed by a major investment once in two years and a minor investment (18.4%) every year. At the shared third place, we find a major investment annually and every four years, combined annually with a minor investment (15.8%). There are no significant differences found between the size of the parks and the frequency of investments.

Table 18 *Impact of major investments (from author's own research)*

	Year 1	Year 2	Year 2	Year 3	Year 3	No investment
		Unaided	Aided	Unaided	Aided	Unaided
Mean	7.5%	5.0%	3.8%	-	2.0%	- 5.0%
Modus	7.0%	5.0%	4.0%	-	2.0%	- 5.0%
% of response	100%	20%	54%	0%	4.0%	82%
Minimum	0.0%	1.0%	0.0%	-	2.0%	- 15%
Maximum	20%	12%	13%	-	2.0%	+ 7.0%

From table 18 it can be deduced that the general average effect of a major investment in a new attraction amounts to 7.5% in the first year. The range is quite large, with a lowest score of 0% and the highest effect of 20%. There are two parks who indicate that their latest major attraction had no effect on the visitor numbers. From the information it appeared that in both cases a slight growth in visitor numbers did take place, but one of the parks attributed this to the influence of the weather and the other to general quality improvement in the park. Without the major investment, these parks would also have expected a slight increase in the visitor numbers. A second remarkable point was that only 20% of all parks spontaneously indicated that the effects of a new attraction would last for two years and not a single park spontaneously indicated expecting an effect to last longer than two years. The average effect in the second year was 5% for these parks. After all the parks were specifically asked whether the attraction in question also had an effect on the visitor numbers in a second or third year, the percentage of parks which held this opinion increased to 54% for the second year and 4% for the third year. The

average effect in the second year was nearly 4%, in the third year 2%. The average view of these aided parks was that the effect in the second year approximately amounted to half of the effect in the first year (and in the third year, once again, half of the second year).

The last column of table 18 demonstrates what the effects would perceive to be if in the year in question no major investments had taken place. On average the visitor numbers would have decreased by nearly 5%. The mode amounts to 5% in the negative. Once again we also see here, however, major differences between the extremes. The most negative situation occurs at a park where the visitor numbers decreased by 15%. A number of parks indicate that the visitor numbers would have indeed increased, but less strongly than in the case of the major investment in the new attraction. The most positive peak concerns a park which, despite no major investments in an attraction, would have expected 7% growth in the year in question.

3.4.2. Specific results

In this section the effects will be further studied concerning the frequency of the investments, how recently they took place and the size of the park. The future expectations of the parks will then be considered in relation to the results mentioned above.

3.4.2.1. Frequency of investments

An interesting question is whether parks that invest more frequently have other effects from their last investments than parks who invest less often. The general industry view is that every so many years investments should be made in a new attraction because otherwise the visitor numbers will decrease. What exactly is every so many years has, however, never earlier been established. From table 19 it appears that the highest effect would seem to occur if the park makes a major investment in a new attraction every three years. Parks that make a major investment every year have an average effect from their last investment of 4.2%, parks who invest every two years achieve on average 6.7% and parks who invest every three years have an average effect from their last attraction of 10.0%. The percentages then decrease once again, respectively 6.2%, 5.4% and 4.3% for every four, five and six years. The results are significant at $p = 0.049$.

If we look at the frequency of major investments in combination with an annual minor investment then it appears that the percentages for the third year are once again the highest. The results practically demonstrate an increase in the entire line if annually a minor investment is made, with the exception of the last two categories. The average effect of a major investment increases from 7.5% to 8.3% if these are combined with an annual minor investment. This increase is however not significant ($p = 0.460$). If a park makes a minor investment every year and a major one annually then the average effect of the last major investment is 4.6%, making a major investment bi-annually and a minor annually provides an effect of 7.3% and tri-annually a major combined with annually a minor provides an effect of 11.9%. The effects then once again decrease, respectively 6.5%, 5.4% and 3.0% for every four, five and six years of making a major investment combined with an annual minor investment. The correlated differences in results between the diverse results are significant ($p = 0.043$). The optimum point thus appears to lie at making a major investment every three years with an annual minor investment. Yet, we cannot naturally state that it is so. It is true that the effect of the last investment is the highest if every three years a major investment is made and every year a minor one, but the total effect of making major investments every year could be higher than the three yearly variant. We do not know, however, what the effect of the other

years would be, because we have only established the effect of the last investment. In addition, in this research the influence on the visitor numbers was examined, but the incomes and expenditures of the investments was not looked into.

Dividing up the effects of not investing in the years in question into the frequency of investing does not result in a consistent and significant picture.

Table 19 *Impact of major investment according to frequency (from author's own research)*

Frequency of investment	Mean*	S.D.	Mean (in combination with minor investment every year) **	S.D.
Every year	4.2%	2.94	4.6%	1.13
Every two years	6.7%	5.55	7.3%	6.45
Every three years	10.0%	4.74	11.9%	4.12
Every four years	6.2%	5.93	6.5%	6.28
Every five years	5.4%	3.20	5.4%	3.20
Less than every five years	4.3%	1.15	3.0%	-
	7.5%	**5.09**	**8.3%**	**5.48**

** ANOVA (F = 2.425; Sig. = 0.049)* *** ANOVA (F = 2.645; Sig. = 0.043)*

3.4.2.2. Recent investments

From table 16 it appears that in 2008 more than 50% of the parks made a major investment in a new attraction. If we divide up the effects into the year of investment (see table 20), then we see that the major investments in 2008 had an average effect of more than 6% whereas the major investments before 2008 realised nearly 9% on average. This difference is marginally significant at p = 0.078. These results are reasonably in keeping with ERA's statement which says that "when parks reinvest in a major new ride or show or zone, the increase in attendance tends to be in the high single digits, whereas a recession impacts in the low single digits" (TEA/ERA, 2009, p.3). Yet we have to be careful in drawing the conclusion that during a recession, the influence of new investments is not so great. Firstly, the effect of the recession is not visible in the complete figures for 2008. In addition, we should check the data for the frequency of investing. It is highly possible that the parks which made the last major investment in 2008 are precisely those parks which invest more frequently. In the previous section we saw that parks who invest more frequently, on average had a lower effect from their last investment. The so-called recession effect could then be caused by the high frequency of investing. The chi-squared test demonstrates, however, that nothing significant can be seen in this area (F=2.524; df = 1; Chi-square = 0.120).

Table 20 *Impact of major investment according to year of investment and size of the park (from author's own research)*

Year of investment	Mean*	S.D.	Size of park	Mean**	S.D.
2008	6.2	5.02	*Large park*	7.1	4.74
Before 2008	8.7	4.78	*Medium large park*	8.6	4.50
			Small park	6.7	5.56
Total	**7.5**	**5.01**	**Total**	**7.5**	**5.01**

** ANOVA (F = 3.379; Sig. = 0.072)* *** ANOVA (F = 0.754; Sig. = 0.476)*

3.4.2.3. Size of the park

In table 20, the results of the last major investments have been divided up according to the size of the park. It is true that differences appear to exist between the parks, but these difference are not significant (p = 0.476). Smaller parks score an average of 6.7% higher visitor numbers, the major investments of middle-sized parks demonstrate an average effect of 8.6% on the visitor numbers and those of the larger parks 7.1%.

3.4.2.4. Future expectations

To conclude the written survey, the parks in question were asked how they regarded the future of the industry for the coming 10 years, as well as how they viewed the development of their own market share. From table 21 it appears that the parks were positively disposed. 60% of the parks expected an increase, sometimes major, in the numbers of visitors in the coming ten years. The other 40% expected the market to stabilise. There was no talk of an expected decrease. It is striking that the same picture emerges for the question about the market share. As many as 77.8% expected an increase, sometimes major, in their own market share, whereas the other 22.2% expected stabilisation. Here we also do not see any parks which expect a decrease in the market share. The last outcome, which in principle is not possible from a macro-economic perspective (unless the sample survey should not be representative), indicate that the parks are confident in the future. Having confidence in the future, for that matter, appears to marginally significantly (p = 0.096) relate to the results from the past. A cross tab between a positive expectation about the market in general and the effect of the last major investment in a new attraction demonstrates an effect of 8.4% if the park expects that an increase, sometimes major, could be said to exist in visitor numbers in relation to an effect of 5.9% if the park in question expects that stabilisation could be said to exist. Whether the positive expectation regarding the market share is a consequence of the favourable results in the past is not known. A significant relation between the expected increase for the market share and a growth in visitors numbers was not found (last two columns table 21).

Table 21 *Impact of major investment according to expected growth market (share) (from author's own research)*

Expectation growth market	Mean*	S.D.	Expectation growth market share	Mean**	S.D.
(Major) increase	8.4	5.71	*(Major) increase*	7.9	5.27
Stabilisation	5.9	3.38	*Stabilisation*	6.0	4.24
Total	**7.5**	**5.09**	**Total**	**7.5**	**5.09**

** ANOVA (F = 2.896; Sig. = 0.096)* *** ANOVA (F = 1.176; Sig. = 0.283)*

3.5. Discussion

The importance of investing in new attractions is regarded by the management of theme parks as the most important manageable factor when it concerns the visitor numbers, both on the short as well as the long term. Managers consider the effect of this to be greater than the price policy and other marketing efforts. This is somewhat surprising because the price instrument is used more regularly than investing in new attractions. Although managers know that competition in prices is not a desirable situation for the theme park industry in general and investing in new attractions is, we see that the price instrument is nevertheless frequently put into action. Managers of theme parks thus appear to employ a sort of marketing myopia and moreover, despite knowing better, implement it in policy. It would be better for the competitive capacity of the theme park industry in relation to alternative choices if the money which was spent on price promotions would be invested in increasing the added value by means of investing in new attractions. For the individual competitive position of a park, this applies to a strong degree. Providing added value would moreover offer the parks the possibility of asking a price premium for their product, which would normally result in more profits and thus possibilities for investment (Poiesz & Van Raaij, 2002). This would create even more possibilities for offering extra value and so a negative vicious circle, caused by price promotions, could indeed be transformed in this way into a positive, upwards-working viscous circle. In this way, parks could guarantee their future turnover and right to exist. The advantage is that the additional turnover would compensate the increased operational and financial costs.

Given the great importance which is attached to the investment in new attractions it is striking that there is so little knowledge available about its effects. Theme parks and industry associations should bring their heads together and set up and support a research programme to gain answers to important questions such as the level and duration of effects. Local associations such as, for example, the Recron, Toerned, Horeca Nederland and Club van Elf in the Netherlands should work more with each other in this area and share their knowledge. Together the national industry associations, like BALPPA, SNELAC, IAAPA Europe etc., should also be placing this research issue high on the agenda. In this, the competitive position between them is of subordinate importance to the communal position of the industry in relation to the increasing number of alternative choices outside the industry. A communal approach by the industry could ensure that in a relative short period of time a large amount of knowledge is generated, so that the chance of a top investment increases and that of a flop investment decreases. For the total innovation capacity of the industry it would be good if the uncertainties which now exist about investments would decrease.

The average effect of the last major investment in a new attraction in this research amounts to 7.5% for the first year. The lowest score was 0%, the highest score amounted to 20%. Only 20% of the parks spontaneously indicated that an effect could also be expected in the second year. Aided this percentage increased to more than 50% of the participating parks, in which the average effect was to halve the effect demonstrated in the first year; namely a small 4%. If parks had not invested in the year that they made their last major investment in a new attraction then, according to their own expectations, they would have had an average of 5% less visitors. On balance this means that setting off a decrease in visitors is relatively more important than acquiring new visitors. Two-thirds of the effect of the new attraction is necessary for setting off a loss in visitor numbers. Only one-third accounts for the acquisition of new visitors. This means that all things being equal in comparison with the year before, a park with a major new attraction has about 2.5% more visitors.

The above average effect is strongly in keeping with the average of the four parks in the study by Cornelis (2010a). His average amounted to 7%, namely respectively 4%, 6%, 8% and 10%. The range of effects such as the ones also appearing from the above study are quite close to the range of results by Cornelis (2010a) where the lowest score was 2% and the highest score amounted to 23%. Yet the results cannot be compared with each other just like that. In the study by Cornelis (2010a) the results were examined for all the attractions which were introduced in the parks in question from the beginning that the data was provided. For some parks it therefore concerns the average effect of more than 10 new attractions, whereas in this study only the effect of the last investment was examined. If we should put the results from the two studies next to each other for the parks which have participated in both pieces of research, we can see what the differences are. We should in principle also be able to ascertain whether the expectations of the managers in question correspond with the results from the econometric study. However, because the results of the econometric study have been presented to the management of the parks in question, it is possible that this knowledge has already been reflected in their expectations about the influence of the last new attraction.

Although the results of the present study are interesting, we have to be careful with interpreting them. Namely, as Cornelis (2010a) indicates, the impact of new attractions has to be examined contextually. According to him, through this the differences between the parks are more interesting that the averages. Or in other words, the outcomes are only interesting if they concern comparable parks. Because we are dealing with a sample survey of a number of independent European parks, in which the larger parks are to a slight degree over represented, the results should not be able to be automatically interpreted for other regions and parks in the world. The European market for amusement parks finds itself in a phase of repositioning, whereas the USA/Canada find themselves in a phase of diversification, Asia/The Pacific in selective growth and the rest of the world in expansion (Anton Clavé, 2007). Within a European context, we will also have to examine the results subtly. As emerged from the study by Cornelis (2010a), the average effect at one European park was only 4% whereas for the other parks it amounted to respectively 6%, 8% and 10%. Causes for the differences lay in both park-related as well as non park-related factors. In the current research the only distinction was made between the size of the park and the frequency that investments were made. These two variables are not sufficient to completely justify a situational look at the problem, but they are in any case two important, restrictive situational variables. Parks which make major investments every year in new attractions, have an average effect on visitor numbers from their last investment of 6%. Parks that make a major investment in a new attraction every three years have an effect of approximately 9%. The differences in the size of the park are not significant. Further research will have to show which constellation of situational factors will determine the level of the effects found. Then managers of theme parks can look for the most comparable benchmark for their own situation.

The present research has looked into the influence of new attractions on visitor numbers. It would be interesting to look at the research from a broader economic perspective and also conduct research into the costs and incomes of investments. From the angle of the stimulus (the investment), a further division into the expenses and kind of theming (Wong & Cheung, 1999) would be interesting, as well as better insight into the debiting, financing and operational costs (Swarbrooke, 2002; Wanhill, 2003). From the response angle it would be interesting to see what the influence is on the turnover, profits, cash flow, ROI and suchlike (Wanhill, 2003).

The most prevailing frequency of investing in new attractions in this research was a major investment every three years, combined with a minor investment once per year. 36.8% of all parks indicated that they employed this investment frequency. It is striking that this also appeared to be the most successful combination. The average effect of major investments in new attractions appears to be the highest with an effect on visitor numbers of nearly 12%. As expected, in the industry there is considerable useful experience, which by means of this research will be accessible for a broad public. It is true that the standard deviation in the most successful combination is quite large (which appeals for a contextual approach to the investment problem) but the result helps to somewhat decrease the uncertainty in taking decisions in the area of investing in new attractions. We still have a long way to go to achieve completely reliable attraction accountability, but we have come a step closer by. In taking investment decisions, as of now we can also fall back on the valuable expectations, knowledge and experience of fellow industry members.

Chapter 4 *Impact of new attractions on theme park attendance*

Year after year, millions of Euros are being invested in new attractions at various amusement and theme parks all over the world (PricewaterhouseCoopers, 2007; TEA/ERA, 2007, 2008). It is remarkable that the investments in new attractions are increasing every year, whereas the impact of these investments on attendance appears to be declining (PricewaterhouseCoopers, 2004b). If this trend were to continue in the future, theme parks would face a difficult and troublesome future. In such a scenario, the advantages generally associated with an increase or assertion of attendance no longer outweigh the strain investments place on theme parks, which will produce a negative spiral. A lack of new investments decreases a theme park's added value and thus also decreases its price premium for the consumer. These occurrences will, in turn, limit profits and further diminish the possibilities for investments (Poiesz & van Raaij, 2002). At present, the theme park industry does not seem to be experiencing this negative vicious circle, as can be inferred from the many and high investments in rides over the last few years. Roller coaster dbase (www.rcdb.com) reports almost 100 new coasters for 2009, which is supposed to be a year of recession. Europa-Park (Germany) added a completely new area to the park (Iceland) including the mega launch coaster Blue Fire, Plopsaland (Belgium) introduced Anubis the ride and in 2009 new rides included El Toro (a wooden coaster in FreizeitPark Plohn, Germany), Vertigo (Tivoli Copenhagen, Denmark), Flug von Novgorod (HansaPark, Germany), ISpeed (launch coaster Mirabilandia, Italy), Falcon (Duinrell, Netherlands), Correcaminos (family coaster in Parque Warner Madrid, Spain), Saw the ride (Thorpe Park, England), just to mention a few. In the USA 2009 was a spectacular year as well with the opening of the B&M flying coaster Manta (in SeaWorld, Orlando) and the Hollywood Rip, Ride, Rockit in Universal Studio's with worldwide highest vertical lift.

For next years' season 35 new coasters have already been announced, including a double wooden coaster called 'Joris en de Draak' in theme park the Efteling (the Netherlands). In addition, this European theme park will invest over 40 million euros in new F&B-facilities, an event location and a conference centre within the next four years. Last year the park invested over 46 million euros in a new resort which doors will open in December 2009. Together with the investment in the latest new attraction, The Flying Dutchman, and some smaller investments, the total amount of money invested in less than eight years will exceed 110 million euros (www.efteling.com). These investments will have a number of effects for the park, the employees and the direct surrounding of the Efteling. There should be considerable economic effects from increased ticket sales, as well as increased employment from growth in attendance during the shoulder seasons. The new ride will lead to an increase in the capacity of the park (intensified by the fact that it is a double coaster) and it will simultaneously spread visitor pressure across different areas of the park. The result of this will be an increased guest satisfaction and a longer average visitor stay in the park, which will in turn lead to an increase of repeat visits and a higher secondary spending. The longer a guest will stay in the park, the more s/he will spend (Anton Clavé, 2007; Price, 2003; Swarbrooke, 2002; Wanhill, 2003).

An increase in attendance, above a certain base level, will also mean more employment which in turn will have a multiplier effect for the region around the park from which most employees are drawn. Increased investment should also lead to socio-cultural and environmental effects (Swarbrooke, 2002). The image of the park should improve due to the (inter)national publicity caused by the growing innovative ability of the park. According to the service profit chain theory (Heskett, Sasser & Schlesinger, 1997) this will in turn lead to higher staff satisfaction and thus increased performance, which in turn will lead to

even higher guest satisfaction and loyalty. One of the environmental challenges the company faces will be to better spread the attendance numbers over the season and the days of the week so traffic jams and parking problems can be prevented. For more potential effects of new attractions see Swarbrooke (2002) and Anton Clavé (2007). In contrast to the case of the economic impact of attractions, the general view seems to be that attractions have an overall negative impact on the environment.

These complex interrelationships between theme park investment and direct and indirect outcomes make it important to gain an improved insight into the effects of new attractions on the performance of theme parks. This article concentrates on the direct economic effects of new investments. Although many other aspects of investment impact are very interesting to study, we think the most important question however is 'what is the impact of a new attraction on the number of visitors?' If we can answer this question we should also be able to answer a number of other questions as well, such as those concerning environmental impacts. From a financial point of view, a clear and concise insight into the extent and duration of the real economic effects (from here on referred to as effects) of new attractions is key to the realization of a responsible and accountable investment policy. The goal of this article thus is to bestow the industry with further knowledge regarding attraction accountability by means of providing an integrated model of effect measurement regarding new attractions.

4.1. Theme park investment predicament

In general, research regarding attractions and theme parks can be considered scarce and relatively young (Liu, 2007; Milman, 2001; Pikkemaat & Schuckert, 2004, 2007; Sun & Uysal, 1994). Swarbrooke (2002) even goes as far as to say that marketing research "has often been the 'Cinderella' area of attraction management in the past" (p.386). Moreover, the limited theme park related research that has been published is largely concentrated on the Walt Disney Company or has come about from a distinctively American perspective (Anton Clavé, 2007; Swarbrooke, 2002; Wasko, 2001).

It thus comes as no surprise that there is limited empirical research that underlines the necessity of continuously investing in new attractions. Regarding the type, timeframe, frequency and payback periods of investments, very little is known. The only studies publicly available performed in this area are the American studies by Hogley, Chen and He (2005) and Kaak (1992). It should be noted, however, that the number of cases used by Hogley et al. (2005) is too limited to include a sufficient number of relevant factors into their model. Alternatively, Kaak's (1992) research only refers to roller coasters in a specific setting, which makes a generalisation of the results nearly impossible. Research regarding price elasticity has been performed more often (e.g. Braun & Milman, 1994; Braun & Soskin, 1999, 2003; Braun, Soskin & Cernicky, 1992; Cebula & McGrath, 2005; Wu & Liu, 2007), but none of these studies includes the effects of new attractions. Studies by Kemperman, Borgers, Oppewal and Timmermans (2000, 2003), Kemperman, Joh and Timmermans (2004), Kemperman and Timmermans (2006) and Stemerding, Oppewal and Timmermans (1999) all have a strong quantitative focus but concentrate on individual responses only, opposed to aggregated behavioural responses. These studies therefore do not offer insights into the effects of new attractions on aggregated attendance. Neither does research performed by Darnell and Johnson (2001), which is, moreover, based on simplified assumptions in order to facilitate modelling. Liu's (2007) work into the profitability of theme parks does not explicitly relate to investments in attractions either.

Within the theme park industry, it appears to be common belief that investments in new attractions have to be made. Inquiries to the top fifteen European theme parks substantiates this belief; the fact that one has to regularly invest in new, large-scale attractions because attendance will otherwise decrease is a commonly accepted concept in the industry. At the same time, industry members indicate that too many factors come into play, making it nearly impossible to isolate the effects of new attractions. However, what was meant with 'regularly' and 'large-scale attractions' could not be explained. There also does not appear to be a general consensus within the industry regarding the various factors that come into play.

It would, however, not do justice to the various companies that have attempted to tackle the investment predicament to state that no research at all has been performed in this field. Nevertheless, none of these research projects are known to have been successful. Renowned industry expert Harrison "Buzz" Price used 35 years of experience as well as data from 33 different theme parks in order to tackle the investment predicament, but failed to achieve the results he was aiming for (Price, 2003). Even the Walt Disney Company, once described as being "beyond excess – four or five standard deviations away from the mean" (Fjellman, 1992, p.16), is not (yet) capable of consistently and correctly predicting the success of their new attractions (DLRP[4], 2008). The capacity of Disneyland Resort Paris' new Crush Coaster, which leaves to be desired and causes large queues even at the quietest of days, proves that it is difficult to forecast the popularity and effects of a new attraction before it is opened to the public. Even though the Walt Disney Company has been attempting to modulate the effects of new attractions for decades, using all possible variables, they have yet to find 'the Holy Grail'.

The fact that 'not even' the Walt Disney Company has been successful at modulating the effect of new attractions does not mean that it is impossible to gain a deeper understanding of the effects of new attractions. One must realize that the dynamics of the Walt Disney Company's resorts are far greater than the dynamics that come into play at a smaller (regional) theme park, such as Tripsdrill, Liseberg, Bobbejaanland, Tivoli Copenhagen, Legoland Windsor or Djurs Sommerland. Desk research shows that, for example, Disneyland Resort Paris offers various entrance tickets with various prices to various segments every single day. Regional theme parks, on the other hand, generally have only a limited price differentiation, making modulation considerably less difficult. It is therefore hypothesized that econometric modelling for regional theme parks will lead to a significantly higher explained variance than modelling for resort-type theme parks. This means that it would be easier to predict the impact of new attractions for the regional parks.

4.2. Econometric modelling in tourism

The past three decades (1975-present), a large number of studies on tourism demand modelling and forecasting have been published (Lim, 1997; Witt & Witt, 1995). Tourism demand modelling research has extensively used both econometric and extrapolative methods; nonetheless, extrapolative methods clearly dominate tourism literature. The popularity of explorative methods appears to be caused by pragmatic reasons; extrapolative methods are less time and cost consuming and a lack of data or incomplete knowledge regarding the causal factors are no unsurpassable objections (Witt & Witt, 1995). Since 1989, researchers have published studies that determine and compare the forecasting accuracy of various forecasting methods. Martin and Witt (1989) were the first to publish an influential study

[4] DLRP (2008) stands for interview with Kleve (director product development, process and projects management), Corbett (VP business insight & improvement) and Armor (director industrial engineering) at Disneyland Resort Paris, November 12th, 2008.

dealing with tourism forecasting accuracy. They obtained more accurate forecasts from several simple extrapolative models than from the more sophisticated traditional econometric model (least squares regression model). Even the simplest model, the naïve no-change model, had a significantly higher forecasting accuracy than the traditional econometric model. Since the study of Martin and Witt (1989), many studies were undertaken regarding the accuracy of different tourism demand forecasting models; however, they reached conflicting conclusions in terms of the methods that generate the most accurate forecasts. For example, Kulendran and King (1997) and Kulendran and Witt (2001) concluded that simple univariate extrapolative models still outperformed econometric models. Adversely, Kim and Song (1998) and Song, Romilly and Liu (2000) concluded in their research that the forecasting performance of econometric models was superior to simple extrapolative models. According to Song, Witt and Jensen (2003) conflicting results may arise because different data frequencies may lead to different conclusions and the performance of econometric models is sensitive to different methodologies used (Clements & Hendry, 1998; Morley, 2008, 2009).

Despite the domination of extrapolative models, econometric methods have two advantages over extrapolative methods (Witt & Witt, 1992). Firstly, econometric models explicitly take into account the impact of changes in the causal variables on the forecast variable. This is a significant advantage, since it closely relates to the goal of the research project at hand. Secondly, we may use econometric models for active ("what-if") forecasting; that is to assess the consequences of possible changes in causal factors. A high need of robustness (concerning the signs) exist for our model, because the main objective of the study is to determine the significant factors relating to the effect of a new attraction on attendance. Therefore, we prefer econometric descriptive methods for modelling the demand for European theme park visits.

4.3. Econometric model for theme park attendance

Based on an extensive literature study, several variables with a potential influence on theme park attendance were identified. In addition to academic research regarding general tourism forecasting as well as theme park forecasting, several industry experts provided valuable input. The following variables were found to have a substantial suspected influence on theme park visitor numbers; income (Crouch, 1994; Lim, 1997; Sociaal en Cultureel Planbureau, 2004; Witt & Witt, 1995), price (Braun & Soskin, 2003; Kemperman et al., 2000; Price, 2003; Richards & Richards, 1993; Swarbrooke, 2002; Thach & Axinn, 1994); cost of travelling (Price, 2003); marketing (Davidson, 1998; Price, 2003; Richards, 1992; Richards & Richards, 1997; Swarbrooke, 2002), weather (ING, 2002; Kemperman, 2000; McClung, 1991; NRIT, 2005a; Price, 2003; SEO, 1995; TEA/ERA, 2007, 2008) and weekend days, national holidays and vacation periods (Corning & Levy, 2002; Goulding, 2003; ING, 2002; Krider & Weinberg, 1998; NRIT, 2005b; Price, 2003; SEO, 1995).

Four European theme parks participated in the econometric model. Three of these theme parks are located in northern Europe; the fourth theme park is located in southern Europe. All four participating theme parks have an annual attendance of over one million (but not exceeding four million). One of the theme parks can be defined as a resort-type theme park; the other three can be described as regional theme parks. All data were processed separately. No pooled modelling was used (which means we did not pool the data of all four parks together), because such a method of modelling would violate one of the primary assumptions of this study; the assumption that there are more differences than similarities between European theme parks (Anton Clavé, 2007; Camp, 2001; Jones & Wills, 2005; Kemperman

et al., 2000; Pikkemaat & Schuckert, 2007; Samuelson & Yegoiants, 2001). In order to increase the number of cases to a maximum and to best explain the daily fluctuations encountered in theme park attendance, daily data will be used for modelling wherever possible. Data from two of the participating theme parks was processed on a daily level; data from the other two participating theme parks was processed on a weekly level, because certain important characteristics for these latter two theme parks could not be obtained on a daily level.

An error correction model was used for modelling, which has the advantage that it is a dynamic model. We therefore can make a distinction between short term effects and long term effects (Backx, 2006; Franses, 1994; Paap & Franses, 2000). This is interesting, because in the theme park industry we assume for instance that on a rainy day we will have less visitors than on a sunny day, and on a weekend day we will have more visitors than on a regular week day. However, we want to know how long these short term effects last and when the model finds a new equilibrium. For example, when we temporarily cut prices (by having a promotion) we will gain visitors in the short term, but we will probably get problems with our price elasticity in the long run. Visitors might become more price sensitive and are therefore no longer prepared to pay the regular entrance fee. The dynamic modelling takes this relationship between short term and long term effects into consideration. Moreover, this model is a so called multiplicative regression model. It does not only show dynamic effects (making a distinction between short and long term effects) but it also generates results as elasticities and multipliers, opposed to a standard regression analysis. Elasticities are of interest because they can be used, for instance, to determine the proportionally effects of a certain percentage price increase on attendance and are easily interpretable by management as well. Multipliers indicate the effects of dummy-variables (a way of representing variables using only zeros and ones); for example, whether or not the Easter holiday causes a 40% increase in attendance. A standard regression analysis is harder to interpret, because the results are presented in non convenient reading unstandardized results, or they have to be read in standardized numbers. These standardizations do not always immediately make sense to the reader. In marketing literature, the error correction model has been used by, for example, Franses (1994), Horváth and Franses (2003) and Paap and Franses (2000).

The econometric model is used to explain the variance in daily (and weekly) visitor numbers by analysing the variance in other variables inserted into the model. This means that when we have, for example, an increase of 1000 visitors in attendance today compared to yesterday (or this week compared to last week), the model will try to explain this increase by looking at weather, vacation periods, and all other variables inserted into the model.

The model in its general shape;

$$\Delta \ln \hat{GNV}_{it} = \mu + \sum_{k=1}^{K} A_k \Delta \ln X_{kit} + \Pi \left[\ln GNV_{i,t-1} - \sum_{k=1}^{K} B_k \ln X_{k,i,t-1} \right] + \varepsilon_{it}$$

Starting at the left side of this formula, we find the difference (Δ, delta) in gross number of visitors (GNV) of today compared to yesterday. For the two parks that were analyzed on a weekly base this means we are looking at the difference in this week's number of visitors compared to last week. Ln stands for natural logarithm and helps to better interpret the results, because we now have a so called multiplicative model (with easy to understand elasticities and multipliers). The left side of the formula is the dependent variable (the difference in number of visitors of today compared to yesterday; or this

week compared to last week) we want to explain with all kind of variables that can be found on the right side of the formula, like the weather, the entrance fee, weekend days etcetera. If we would put all these latter (independent) variables into the formula individually, we would end up with a very long and unreadable formula. That is why summation sums are used for these variables ($\sum$). At the right side four elements can be found. First we see a μ which is a constant; a kind of a baseline level of attendance we normally have, and cannot be explained by the variation in the variables that are being used. Then a summation sum ($\sum$) of the short term effects can be found. The *X* stands for all variables that are taken into consideration in the model; the *A* is the short term effect of all these individual variables. Δ means we are looking at the short term effects. After the + sign, between the brackets, the long term effects can be found. This can be read in the same way as the short term effects. In this case *B* stands for the long term effect of all individual variables. The variables are exactly the same as the variables in the short term part of the formula; the effects are different. T-1 in the subscript of the variables means data of yesterday/last week are being used. $\prod$ is used as a so called adjustment parameter and determines the average speed of convergence to the long run relationship. The formula ends with an error term (ε), because a model is not always exactly right in predicting.

4.4. Impact of new attractions on performance

Since no pooled modelling was to be performed, four individual error correction models were composed; one for each participating theme park. These models were produced by first inserting the most important variables one at a time (starting with the addition of a new attraction, because this is the main focus of our research), than judging the outcome of the model at face value and finally judging the outcome of the model in a statistic manner. In doing so, the significance (F-value), R-square, multi-collinearity (a situation in which two or more variables are very closely linearly related (VIF-value)), auto-correlation (Durbin Watson) and the robustness of the model were monitored and kept within proper boundaries (Field, 2005; Franses & Paap, 2001; Malhotra & Birks, 2000). Subsequently the predictive validity of the models, meaning how good the models predict the number of visitors to the theme park, was tested by estimating total attendance for 2007 based on the data set of the previous years. In the case of Park D, the park from which the results will be detailed in this article, the model's prediction of 2007 visitor numbers was 99% accurate. The models for Park A, Park B and Park C had 99%, 98% and 98% accurate predictions, respectively.

In the end, the following variables were used in the model; weekend days, national holidays, vacation periods, average temperature, total precipitation, opening hours, entrance fee, the addition of a new attraction, the retheming of an existing attraction, the addition of a new show and the occurrence of a special event. An overview of other variables that were introduced into the model but were subsequently removed due to the above mentioned criteria can be found in table 22.

Table 22 *Variables included and excluded from the model*

Reason for Inclusion	Variables
Significant Effect (and No Reason for Exclusion)	Weekend days, national holidays, vacation periods, average temperature, total precipitation, opening hours, entrance fee, the addition of a new attraction, the retheming of an existing attraction, the addition of a new show and the occurrence of a special event
Reason for Exclusion	**Variables**
Multicollinearity	The real (i.e. consumer price index corrected) price of gasoline, the real price of highway tolls, the real price of a regular admission ticket for one day, the real price of a children's admission ticket for one day, the real price of a family admission ticket (two adults and two children) for one day, the real price of a parking ticket for one day, the total number of shows and theatre performances, the number of different shows and theatre performances, the number of food & beverage outlets, the number of retail facilities, the number of exhibitions, the number of attractions, the cumulative capacity of attractions, the number of new attractions, the period of time between the opening of new attractions, dummy variables for events such as soccer championships, opening and / or operation of large competitors
Insufficient Information	The real marketing budget, the real budget for shows and theatre performance, the number of season ticket holders, the real investment in new attractions
Relevance for Park D	The number of wholly owned beds
Not Significant	Average net disposable income of the catchment area, average population of the catchment area

The explained variance of the four models varies greatly, from a low of 47.7% to a maximum of 64.6%. It is remarkable to note that the theme park with the lowest explained variance was the resort-type theme park, from here on referred to as Park A, in line with our earlier hypothesis that econometric modelling for regional theme parks will lead to a significantly higher explained variance than modelling for resort-type theme parks. However, it cannot be said with utmost certainty that the relatively low explained variance was caused by the fact that Park A is a resort-type theme park. Therefore we cannot accept our hypothesis, yet we choose to maintain it in light of the current evidence and indications.

In the proceeding text, the results of Park D, the theme park with the highest explained variance, will be discussed.

Table 23 depicts the output of the model for Park D. The adjusted R Square of this final model is 64.6%, meaning that almost two third of the variance in daily attendance for park D can be explained through the use of the model. As can be derived from this table, the average long-term attraction effect is 10.2%. Although this is the first time we find this kind of public evidence for the impact of new attractions, some remarks have to be made. First of all, these results are only found for park D, they cannot be generalized to other theme parks (yet). The situation for theme parks A to C is different from the one of park D, meaning the impact for these parks will differ as well. Secondly, the impact of this variable is only significant at a $p<.10$ level, which means that we have to be careful by interpreting. It does not seem to be a very strong effect, for this park. Other variables seem to matter more, like having a Halloween season ($p<0.05$). The result should be interpreted as a multiplier, meaning that introducing a new attraction in this park has an average positive effect on attendance of 10.2% compared to no increase or positive effect when no new attraction were to open.

Table 23 *Results of theme park D*

'Results Park D'	Short run effect					Long run effect				
Effect (variable)	Parameter estimate [a]		Stand. error	M/E [b]	Short run effect on GNV	Parameter estimate [a]		Stand. error	M/E [b]	Long run effect on GNV [c]
Adjustment parameter (lnGNV_t_1)						-0.422	***	0.018		
New attraction effect	-0.244		0.207	M		0.041	*	0.024	M	1.102
Retheming interaction effect	-0.337		0.337	M		-0.110	***	0.029	M	0.770
Real regular admission price effect	-4.867	***	1.485	E	-4.867%	-0.481	***	0.063	E	-1.139%
Vacation period days effect	0.244	***	0.048	M	1.276	0.067	**	0.021	M	1.172
Weekend days effect	0.403	***	0.021	M	1.496	0.030		0.024	M	
National holiday effect	0.502	***	0.039	M	1.652	0.266	***	0.052	M	1.878
Opening hours effect	1.686	***	0.114	E	1.686%	0.562	***	0.078	E	1.331%
Temperature effect	0.116	**	0.042	E	0.116%	0.126	***	0.026	E	0.298%
Precipitation effect	-0.006	***	0.001	E	-0.006%	-0.007	***	0.001	E	-0.016%
New show effect	-0.173		0.204	M		0.035		0.024	M	
Halloween effect	0.244	***	0.056	M	1.238	0.110	**	0.053	M	1.297

*[a] * = p<0.10 (two-sided test); ** = p<0.05 (two-sided test); *** = p<0.01 (two-sided test)*
[b] M = multiplier effect of change in dummy variable; E = elasticity effect of change in ratio variable
[c] Long run effect on GNV if permanent change in variable; Cumulative long run effect on GNV if temporary change in variable
NOTES: N = 1850, R^2_{adj} = 0.646, F = 136.163, df = 25
Calculating long term multiplier: exp (parameter estimate/ - adjustment parameter); long term elasticity: parameter estimate/ - adjustment parameter; short term multiplier: exp (parameter estimate); short term elasticity: parameter estimate.
The short-term effects were calculated using the so-called 90% duration time calculation; ln (1-0.9) / ln (1 + adjustment parameter). The 90% duration time for Park D was, according to this calculation method, 4.2 days

The econometric model's outcomes lead to two important conclusions regarding the identified effects of new attractions on attendance. First, by means of dynamic modelling it became apparent that a significant increase in attendance has been recorded for all eight new attractions (two of them were rethemings of an existing attraction) that opened at Park D during the span of this research project. These effects, however, never last more than two years; after this period, the effects are no longer significant. This has been tested by maintaining the new attraction dummy-variable at 1, meaning positive, for several years. In the second year after its opening, a new attraction still has significant effects on attendance. The impact in the second year is however more or less half the effect of the first year. Beyond the second year, the effects of a new attraction on visitor numbers were found to no longer be significant. Secondly, it can be discerned from the research results that there are no significant short-term effects regarding new attractions, only significant long-term effects could be established. For an explanation of the short term effects please have a look at the notes of table 23.

The estimated effects on attendance were calculated for all eight new attractions (opened at Park D within the span of the research project) individually, compared to a situation where no new attraction would have opened in that particular year. This means that for every year a new attraction was opened, two alternative models were run; model A in which the new attraction variable was set at 1, meaning

positive, and model B in which the attraction variable was set at 0, meaning negative. The subsequent calculation of the difference in attendance between model A (the modulation with a new attraction) and model B (the modulation without a new attraction) offers an insight into the effect of the new attraction that was opened in that specific year. The results obtained from this method of calculation varied from a relatively small positive long-term effect of 2% (for a 3D/4D attraction, which was not one of the two retheмed attractions) to a significantly larger positive long-term effect of circa 23% (a dark ride). Table 23 also shows that retheming an existing attraction has a significant lower effect on the attendance level than adding a completely new attraction. The effect of a retheming is 77% of the effect of a new attraction. For park D this means that on average a rethemed attraction adds 7.9% to the number of visitors. The variance in effect is relatively large for Park D, with a difference in effect between the lowest and highest scoring attractions of 21%. This variance was considerably smaller for the other three parks that participated in this study, with the lowest observed variance in effect being 9% for Park C.

However, based on the results from Park D we cannot come to the conclusion that 3D/4D attractions thus have a significantly smaller influence on attendance than dark rides. There are not enough 3D/4D attractions in our dataset to determine whether or not the limited impact of this particular attraction was caused by the type of attraction, or that it was the result of, for instance, the attraction's theming or storyline. The same applies to dark rides. It may very well be possible that the type of attraction yields an apparent effect, but that the real explanation for the differences in effect between several new attractions must be attributed to other factors. For example, Swarbrooke (2002) states that the effect of a new attraction is partially influenced by the organisation and its resources, the product, the market and the management of the attraction / theme park. A company's resources are not merely limited to the investment in a new attraction but include the marketing of that attraction and all other investments in high quality facilities and service. Organizations experiencing cash flow difficulties often reduce levels of facilities and services, which recurrently leads to an inferior product and, ultimately, a decrease in attendance (Swarbrooke, 2001). The product, as well, is more than just the new attraction. Special events, a high quality environment (e.g. clean, aesthetically pleasing) and enthusiastic, well trained and motivated staff members are part of Swarbrooke's product dimension as well. Richards and Wilkes (2008) substantiate Swarbrooke's argued influence of factors such as company assets by claiming that success would only come through 'competing through customer focus', which involves a focus on product, people, pricing and marketing. This thus means that the difference in effect on attendance between two attractions might, for instance, be due to the staff working at new attractions or the facilities that surround them.

Looking at table 23 once again we could make the distinction between controllable and uncontrollable factors that influence attendance levels. The uncontrollable factors are weekend days, national holidays, vacation periods, temperature and precipitation. These factors all have a strong effect on the numbers of visitors. For example, on a weekend day there are 1.49 times as many visitors in the park than on a regular day. On a national holiday (like Easter) this is even 1.65 times as much. The controllable factors that are included in the final model are new attraction, new show, attendance fee, opening hours and having a Halloween event. Adding a new show to the park does not have a significant influence on the attendance level. This does not mean that having shows is not important for this particular park. However, this effect might be captured by the overall appearance of the park and the fact that only slightly modifications to the shows were made during the research period. For Park A adding a completely new show caused a significant 25% long term increase in attendance. The effect of Halloween on the attendance level turns out to be higher than adding a new attraction; even in the long run. Having

a Halloween event means 24% increase in number of visitors compared to having no Halloween effect. In the long run this effect is even higher (30%), which seems to show that visitors are satisfied about the event, communicate about it via word-of-mouth and do return during next year's event. Knowing that the Halloween event often takes place on a weekend day, and does have extended opening hours, one can imagine that Halloween weekends are amongst the busiest periods of this park's season. Finally, the price elasticity is interesting to explore. There is a very high negative price elasticity in the short run (-4.867%) and a moderate negative in the long run (-1.139%). If the park increases the price in the beginning of the season by 10% (for instance from € 20.00 to € 22.00), the number of visitors will drop dramatically during the first few days, and will remain constant at a 13.9% lower level in the long run. The challenge, however, is to increase the price to a level that is needed to have enough cash flow to add new value to the park. With a negative price elasticity in the long run this is a serious challenge.

4.5. Conclusions and discussion

In this article, the results of an econometric study explaining the variance in theme park attendance were detailed. Whereas most previous attempts were unsuccessful (DLRP, 2008; Price, 2003), the author's model for Park D achieved an explained variance of 64.6% and a predictive validity of 99%. The impact of adding a new attraction to the number of visitors to theme park D was 10.2% and lasted for two years. However, large differences were found within this park. The weakest attraction only added 2% to the attendance levels, whereas the strongest new attraction added 23%. Both new attractions where defined as major investments (by their own management). This could be seen as the difference between success and failure, profit and loss. Three other theme parks participated in this study as well and they all showed similar results. Although the differences in results of park D are the most extreme, the smallest range of success was 9%, which is relatively still high. Knowing that all parks in this research are managed by experienced people, these results show the difficulty the industry seems to have with deciding on new attractions. Finding the real impact of a new attraction on the attendance level of a theme park is very important, however finding an explanation for the results is even more important for the future. Theme parks should consider looking at both sides. This is not an easy task, but it is possible. Most theme parks have the data that are needed to replicate this study, and they now know to analyse them, so the econometric part can be dealt with. An explanation for the observed (and to be found) variance can also be found. However, we therefore need to take the complex system of theme park demand into account. Not only is a new attraction's success influenced by factors such as the organisation and its resources, the product, the market, the management of the attraction / theme park (Swarbrooke, 2002) and the company's customer focus (Richards & Wilkes, 2008) but by the origin and recent development of the theme park it is located in as well (Anton Clavé, 2007). A situational approach regarding the effect of new attractions on the performance of European theme parks would therefore do the complex reality more justice than a simplified and general approach. The research results regarding Park D show that a certain dark ride has had a different effect on attendance than a certain 3D/4D attraction, for a reason that is yet unknown to us. However, it is suspected that this might not have been the case if the attractions would have for instance, opened during another year. A dark ride will, after all, be evaluated differently during a wet and dreary summer than during a warm and sunny summer. For the sparse public evidence regarding this subject, please refer to Cornelis (2003), and Fichtner (1997).

Inspired by the accountability studies of Franzen (Franzen & Goessens, 1998; Van den Putte, Cramer & Smit, 1999), Cornelis (2008) introduced a so-called Attraction Response Matrix (ARM) to deal with the abovementioned explanation part. The basic assumption of this ARM is '*in situation A, attraction B*

will most likely have effect C (on target audience D)'. In this ARM, situation variables (A) and attraction characteristics (B) were distinguished as stimuli on the one hand and four levels of possible effects (C) (attraction response, park response, brand response and economic response), on a certain target audience (D) were distinguished as responses or output on the other hand. The division in effect levels was constructed based on the results of a Zaltman Metaphor Elicitation Technique (ZMET) study performed at one of the participating parks. For general information regarding ZMET, please refer to, among others, Catchings-Castello (2000), Christensen and Olson (2002), Olson and Zaltman (2001), Zaltman (1996, 1997, 2000, 2003), and Zaltman and Coulter (1995). Additionally, a time component with four distinct dimensions is included in the matrix (Cornelis, 2010a). The time component subdivision is based on the distinction made by Le Bel (2005), O'Sullivan & Spangler (1998) and Swarbrooke (2002). In order to determine the effect of a new attraction, one must first examine the situational variables (A) and the attraction characteristics (B) on the one hand, and then investigate to which effects (C) certain specific constellations of situations and attraction characteristics will lead, and how these effects will mutually relate (for each target group). So if a new attraction was added to the park we should do an econometric study to find out what the real impact of this attraction is on the attendance level, compare it with all other attractions that were added in the past, and then find an explanation by looking at the individual responses, in relation to the characteristics of the attraction. In this way we might find that the 23%-attraction makes a better fit to the brand, than the 2%-attraction does. We then still must be careful in interpreting these results, but if we use this insight to look at all other attractions and their results, we are better able to understand the large differences between these attractions. We can use this information to make better predicaments for the future.

To put is simple and straightforward, theme park managers should not only look at this year's results compared to last year's results and award all positive effects to this year's new attraction, but instead, they should also look at all other variables that might influence the attendance levels, like the once mentioned in this article. After having done this (econometric) analysis it would be very useful to look at the two most extreme results and try to explain the large differences between the best and the weakest attraction. This can be done in many ways, by looking at different levels of effects. One could, for instance, use a survey, a focus group, an individual interview, experiment etcetera amongst the guests of the park and measure their experiences, feelings, cognitions, (dis)confirmations, associations, satisfaction, repeat visits, etcetera. If strong correlations between these different effects could be found, that would be informative. But even the unrelated effects as such are very useful if supplementary research would be executed. One could find the characteristics of the attractions that do matter for the guest and find out how the results are related to these characteristics. In this way theme park managers will increase their insights into how to add value to the park and therefore be able to let their visitors pay a price premium, which leads to more turn over and profits and therefore more possibilities to invest in adding value in the future. In this way the negative vicious circle mentioned in the introduction of this article, can be turned in a positive way. Long term profitability will be the ultimate reward of this exercise.

There are some limitations to the study presented in this article. The following variables were included in the definitive model for Park D; weekend days, national holidays, vacation periods, average temperature, total precipitation, opening hours, entrance fee, the addition of a new attraction, the retheming of an existing attraction, the addition of a new show and the occurrence of a special event. Even though the explained variance of the econometric model was considered to be high, it is believed that this value could be even higher when marketing data could have been included in the model. Marketing budget / spend has been mentioned as one of the most important factors that influence the

effect of a new attraction on attendance by academic peers (Davidson, 1998; Price, 2003; Richards, 1992; Richards & Richards, 1997; Swarbrooke, 2002), as well as industry professionals. However, due to the complex nature of marketing spend and the various forms of partnerships and joint promotions it was beyond the span of this research project to develop a method with which the exact daily marketing spend can be unambiguously calculated. Even if we were able to put the marketing variable into the model, we should realise that the effect might be ambiguous due to multi-collinearity reasons, for many theme parks increase their marketing budget in the same year they open a new attraction; to announce their added value. Nonetheless, it probably would improve the model if marketing data could be entered. It would actually be better if the gross rating points, bought with the marketing budget, would be entered in the model. For some theme parks it would also make sense to capitalize the free publicity to gross rating points, for many theme parks get more attention via free publicity than via paid forms of marketing communications. Additionally, the models for two of the participating theme parks could have been more precise if daily data could have been used instead of weekly data. While the importance of the use of daily data is recognized, such detailed data is not always available or retrievable. It must be noted though, that the predictive validity as well as the explained variance of both models compiled using weekly data was of sufficient quality to be representative.

It should be clear by now that attraction accountability is an important subject within the theme park industry. Investments in new attractions are very high and the budgets seem to increase every year, whereas the expected outcome of the investments is very unclear. Large differences between and within theme parks, considering the impact of new attractions on the number of attendance, can be found. However, the methods used in this article to unveil the impact of new attractions are rather complex. As explained in section three this is one of the disadvantages of econometric studies compared to simple extrapolative forecasting models. For those who do understand the statistics they can do a replication of this study by themselves, for most theme parks do have the data needed. Yet, in our industry lots of managers are skeptical of complex statistics and things that cannot be explained in lay man's terms. Especially if the marketing budget cannot be inserted in the model, one wonders what the use of this kind of econometric research would be. Another, and probably easier, way of investigating the impact of new attractions which has not been used so far, is asking for the insights of theme park managers. Managers of theme parks have to continually take decisions despite a great deal of uncertainty sometimes existing. Through sharing their experience and knowledge of the industry, they could help to decrease this uncertainty for each other. We should develop a good research method to help managers better understand the real impact of new attractions. Being aware of all variables that do influence this impact is a first step in a better judgement of the impact of a new attraction. If only for that reason the results of this article would be useful.

As stated in the introduction the answer to the question 'what is the impact of adding a new attraction to a theme park?' is a very important one. Not only are we now better able to decide whether, when and how to invest in new attractions, but we can also have a debate about the real impact of new attractions on the environment. If a new attraction for Park D adds 150,000 extra visitors in the first year and 70,000 extra visitors in the second year, we can relatively easily calculate for example the use of gasoline, water, hotel laundry, etc. caused by this attraction. One of the main challenges for most theme parks is, however, not the total number of visitors during a year, but the spread of visitors throughout the year, week, day and park. The lowest number of visitors on a certain day was 524 for theme park D and the highest number of visitors was 29,374 for the same park, in the same year. This multiplier of 56 is not unusual for theme parks, which makes the challenge evident. It is therefore important to have a

good insight into the actual and possible needed design day, the peak moments and places, the impact of all variables mentioned in this article and the behavior of guests. As mentioned above, these are very interesting questions to be answered but are beyond the scope of this article. The author invites other researchers to elaborate on these aspects.

Supplementary replications of and research into the econometric model will be performed by the author in the near future, as part of the development of the before-mentioned ARM. An emphasis will be placed on regional as well as resort-type theme parks, preferably using daily data. Additionally, future ZMET-studies and -experiments are being planned in order to further explain the differences in performance of new attractions. At this moment 8 parks in Europe are participating by sharing their data (with the author). If more parks would participate in the future, more knowledge with regard to attraction accountability will be accessible for the theme park industry in general. It is the author's believe that theme parks should not be too conservative about sharing information due to competitive reasons, because the real competitive threat will most probably come from outsight the industry. It would be a marketing myopia to only look at the direct competition.

Chapter 5 *Achieving attraction accountability through an attraction response matrix*

Within the theme park industry, large investments in new attractions are made on an annual basis. There is a commonly-held belief within the industry that frequent investments in new attractions have to be made in order to maintain the interest of both existing and new customers (TEA/ERA, 2009). Mommaas et al. (2000) argue that, because of the 'condensing, interlocking and expansion' of the theme park industry, European theme parks not only compete with each other but also with products, services and experiences from the leisure industry as a whole. Oppermann (2000) argues that this intensified competition increases the necessity to invest, because a theme park would otherwise suffer diminishing attendances. When reviewing the investments in new attractions, it seems that the amount of money spent on new attractions increases annually, while the effects of these new attractions on attendance appears to diminish (PricewaterhouseCoopers, 2004). The ideal scale and frequency for investments in new attractions are still unknown.

Understanding the effects of new investments also requires an analysis of the factors that influence the impact of investment; only then can a predictive model be constructed. However, previous work on the impact of investments on attendance has only employed a posteriori analysis of data from individual parks. Van Oest et al., (2010) studied the effects of investment at the Efteling theme park in Holland. The Efteling is the third largest theme park in Europe with 4 million visits in 2009. It is a very unique park, mainly based on fairy tales (Van Assendelft de Coningh, 1995). Cornelis (2008, 2010b) analysed data from four parks, each with a different social origin, and showed that there were more differences than similarities between the results of the participating parks. He argues that a contextual approach for the impact of new attractions is needed.

The question that now arises is whether or not it is possible to transform this a posteriori knowledge into a priori knowledge. In other words: to what extent can analysis of the relationship between investment and attendance be used to determine the effect of a new attraction on attendance before – and not after – it is built?

To answer this question, an insight into the underlying causes of attendance growth needs to be gained. What if we found that a dark ride in a certain theme park has had a larger effect on attendance than a 3D/4D show; what does that mean? The difference in the eventual (behavioural) response is obvious: the dark ride causes more attendance than the 3D/4D show. However, what is yet unknown, is the cause of this response. One might hypothesise that the cause lies within the story the dark ride is based on, the theming of the attraction or the attractiveness of the stimuli that the dark ride offers park guests. An explanation may be found in sensory perception, in the evocation of pleasant as well as relevant emotions or perhaps even in a cognitive response regarding the recognition of pleasant memories of the past. It is not until we better understand which stimulus and related intermediary response are responsible for the final behavioural response, that we increase our chances of success in forecasting the performance of new attractions. This article proposes the Attraction Response Matrix (ARM) as a tool to gain an improved insight into and map these stimuli and intermediary responses.

5.1. Previous research on theme park investment

In his review of previous research, Cornelis (2010b) underlined the lack of academic theme park research in general, and the lack of empirical work on investment impacts. Anton Clavé (2007) argues that increasing numbers of European amusement and theme parks are theming their new attractions, which significantly increases the level of investment. Whether or not theming leads to additional attendance (and if so, if this additional attendance is then sufficient to account for the extra expenses) is, however, unknown. Van Oest et al., (2010) argue that the ROI on themed attractions is lower than the ROI on thrill attraction, but their research was only done at the Efteling. Whether this is also true for other parks than the Efteling is yet unknown. The Attraction Response Matrix could be helpful in answering these questions, where it is supposed to investigate the causal relations that are assumed to be responsible for the final behavioural responses. Research by Cornelis (2005, 2010c) showed that attraction characteristics can influence brand associations regarding a (theme park) brand. By using the Attraction Response Matrix one could figure out how these brand associations are related to additional attendance. There are other studies relating to the subject in one way or another (e.g. Ah-Keng, 1993; Ahmadi, 1997; McClung, 1991; Milman, 1988; Rajaram & Ahmadi, 2003; Roest, Pieters & Koelemeijer, 1997; Scheurer, 2004; Thach & Axinn, 1994; Wong & Cheung, 1999), yet these studies are a few exceptions to the rule of relatively limited industry knowledge regarding the effects of investments in new attractions. The information contained in these studies is, however, fragmented, and a more integrated approach would help increase our understanding of the problem. The limited knowledge available primarily relates to common tourism models and predicaments (e.g. Fyall, Garrod, & Leask, 2003; Kim, Cheng & O'Leary, 2007; Lim, 1997; Witt & Witt, 1995; Young & Young, 2008). Very few is known regarding theme parks specifically (Fyall et al., 2003; Price, 2003; Swarbrooke, 2002). Bonn, Furr and Dai's (2005) work does deal with Florida theme parks, but approaches these facilities from a tourism perspective, instead of a theme park perspective.

5.1.1. Disney and America

Research regarding attractions and theme parks is thus relatively undeveloped (Liu, 2008; Milman, 2001; Pikkemaat & Schuckert, 2007; Sun & Uysal, 1994). The few studies that have been published primarily focus on Disney and tend to have an American perspective (Anton Clavé, 2007; Formica & Olsen, 1998; Swarbrooke, 2002; Wasko, 2001). The question that needs to be asked, is to what extent this latter knowledge can be applied to theme park industry in other parts of the world (Camp, 2001; Curwen, 1995; Maanen, 1992; Richards & Richards, 1998; Stevens, 2003; Swarbrooke, 2002). There is for instance a huge difference between the European and American theme park industries, with the American market currently in a phase of concentration and diversification, and the European market being primarily characterized by adaptation and repositioning (Anton Clavé, 2007). Moreover, most European theme parks are still independently-operated, whereas the American market is primarily controlled by five major chains (Walt Disney Parks and Resorts, Universal Theme Parks, Six Flags Corporation, Cedar Fair and Busch Entertainment Corporation).

Furthermore, the direct translation of Disney-related research to other contexts can be problematic. Budd and Kirsch (2005), Fjellman (1992), Giroux (1999), Maanen (1992), Schickel (1997), The Project on Disney (1995) and Wasko (2001) have all argued that Disney's situation is so unique that any comparison with other theme parks is difficult. Because of this extreme complexity of the Disney theme parks it is also very hard to model the effects of new attractions, whereas this seems to be possible for theme parks that deal with a less complex reality (Cornelis, 2010b; DLRP, 2008).

Research into theme parks is also hampered by the view that theme park do not constitute a serious field of study. Leisure as a whole is generally perceived to be "a relatively innocent social phenomenal, something trivial where few problems are to occur" (Mommaas, et al., 2000, p.21). This might be even truer for the theme park industry. Many authors and scientists, mainly from the fields of French social theory and Northern American cultural studies, are very critical regarding theme parks as artefacts of mass consumption (Anton Clavé, 2007) or even refer to Disney-products with a certain disdain (Bryman, 1995, 1999a, 1999b; Jones & Wills, 2005; Project on Disney, 1995; Wasko, 2001; Wasko, Phillips & Meehan, 2001). Authors like Ritzer (1993) loathe hamburgers, Hollywood and Hard Rock Cafés and appear to have forgotten that people genuinely and wholly enjoy eating a hamburger, appreciate the cleanliness and safety of Disney's theme parks and perceive the imminent presence of a sparkle of 'magic in the air' a guarantee for success with their children (Dagevos, 2000).

> *"(…) the question that must be asked, as Marcus (1997) maintains, is whether the critical discourse that underlies the arguments put forward in academic books and journals (even in some semiological works with so much predication that they are cited in this book, such as Eco and Baudrilland) really goes beyond what an everyday conversation may provide" (Anton Clavé, 2007 p.xiv).*

Another reason for the lack of public available research in the theme park industry might be the confidentiality of information. Apart from the Efteling theme parks would not like to share ROI or other (financial) performance indicators with the public and competitors.

5.2. A contextual accountability approach

As stated in the introduction of this article a contextual approach is needed. Parry and Johnson (2007) recently discussed the importance of a contextual approach to the leisure experience. "Research that contextualizes leisure and encompasses the complexity with which it is lived is needed. [….] Rather than simplifying and reducing leisure experiences, leisure studies scholars seem to want to contextualize leisure experiences and treat them as a complex phenomenon" (p.121). It seems logical that a contextual approach is needed within the theme park industry as well, in order to gain an insight into the effects of certain strategies, among others the investment policy.

The development of new attractions is always a result of the compromise between a number of forces, some of which may be contradictory; including internal organizational objectives for the project, design constraints and external audiences. The first component is defined by Swarbrooke (2002) as comprising profit and income generation, economy of operation, flexibility, safety and security, all-weather operation, user friendliness, welcoming for visitors with special needs, environmental friendliness and aesthetic appeal. Especially the short-term objective of profitability within each financial year is of interest, since it is generally considered to be an essential prerequisite in the private sector. A greater insight into the financial consequences or performance of new attractions would thus be highly beneficial for the theme park industry. According to various authors (Anton Clavé, 2007; Garrod, 2008; Liu, 2008; Richards & Wilkes, 2008; Roth, 1994; Swarbrooke, 2002; Wanhill, 2003), new attractions are ultimately assessed on financial criteria; do the benefits or gains outweigh the costs? Being able to forecast a new attraction's financial impact on a theme park would simplify the trade-off between the various internal organizational objectives considerably. It would moreover aid dialogue with external stakeholders, such as planning authorities, funding institutions and potential customers and would change the way design constraints are looked at. One of the main design constraints is project budget, but factors such as

culture of the organization, site problems, legal aspects, planning policies and climate can all influence the profitability of attraction investments (Swarbrooke, 2002).

A further issue is that the development of new attractions is primarily based upon subjective, intuitive judgements about the possible responses of visitors. Research into the effects of attractions has therefore been, to date, insufficient and fragmentary by nature, which will not provide adequate results in the long-term (Cornelis, 2008; Rouse, 2003; Swarbrooke, 2001). According to Le Bel (2005) a methodical approach is necessary to achieve improved benefits: "Without a systematic approach, experience marketing can only be left in the hands of creative and intuitive designers and managers, who albeit talented and well-intended, may not see the customer experience in its entirety and complexity" (p.448).

Some authors, however, wonder whether or not these creative and intuitive designers are a threat to the theme park industry, or, au contraire, its strength. Hesmondhalgh (2007), for instance, argued that the cultural industry, which could include theme parks, is characterized by a certain individuality which makes it difficult (if not impossible) to generalize operational and managerial principles. The creative and intuitive approach could be the industry's strength (and myth). Swarbrooke (2002), in a similar fashion, argues that "there is no guarantee of success for an attraction that follows any set of principles" (p.141).

As part of the creative industries, theme parks also rely to a certain extent on the creative spark supplied by designers and imagineers. As Swarbrooke (2002) notes "many successful attractions also have something special, an intangible 'magic' about them which is impossible to create artificially" (p.141). A further uncertainty is introduced by the theme park audience, who may display rapid shifts in preferences and behaviour, particularly when theme park marketing relies heavily on media images.

In spite of the problems in generalising about the performance of theme parks, the significant scale of the financial investments involved in new attractions makes the development of a model of investment effects desirable. The main premises that should be adhered to when developing such an approach is the situational view of new attraction development and research; meaning that in situation A, attraction B will most likely have effect C on target audience D. Crucial in this statement is that it relates to probabilities, not certainties. Secondly, it must be noted that the probable effect of attraction B in situation A (on target audience D) does not automatically translate to situation Z. A new launch coaster in Park A (Europa-Park) could lead to an increase in visitor numbers of 10%, whereas that same launch coaster would only have a positive effect on attendance of 3% in Park Z (PortAventura). It is only when we see the mutual relations between attractions, situations, target audiences and effects (as proposed in ARM) that we are better able to make relevant interpretations for a priori decision making. In other words, we should try to understand why a certain launch coaster causes an increase of 10% at park A where a more or less similar launch coaster would only cause a 3% increase in attendance at park B.

5.2.1. A preliminarily attraction accountability study

During the 2007-2008 period an econometric study was performed into the effects of new attractions at four large European theme parks (Cornelis, 2010b). The objective of this study was to investigate the impact of adding a new attraction to each theme park individually. All parks, except for one park in southern Europe, were located in north-western Europe. Each theme park had approximately one to four million visitors annually. The data were processed separately. No pooled modelling was

used, because one of the primary assumptions of this study was that there are more differences than similarities between European theme parks (based on Anton Clavé, 2007; Camp, 2001; Jones & Wills, 2005; Samuelson & Yegoiants, 2001). A pooled model would not take these differences into account and would process all data jointly. The advantage of a pooled approach would be a larger number of cases. However, by using daily and weekly data for modelling a larger amount of cases was available per park than would be available with a monthly pooled model for all four parks. Data from two of the parks were processed on daily level; data from the other two parks were processed on a weekly level because certain important characteristics for these latter two parks could not be obtained on a daily level. Several factors such as visitor numbers, temperature, precipitation, price of gasoline, the possible introduction of a new attraction, the entrance fee and many more were recorded for all four parks and were then being processed by means of the robust dynamic error correction model. Dynamic models are, for this type of analysis, more robust and thus preferable over static models (Morley, 2008, 2009). Moreover, the error correction model has the advantage that we can directly link explanatory variables to the immediate and dynamic effects (Fok, Horváth, Paap, & Franses, 2005) opposed to a standard additional regression analysis (Backx, 2006; Paap & Franses, 2000; Franses, 1994). A multiplicative error correction model thus not only shows dynamic effects (making a distinction between short and long term effects) but it also generates results as elasticities and multipliers. Elasticities are of interest because they can be used, for instance, to determine the effects of a price increase on attendance and are easily interpretable by management as well. Multipliers indicate the effects of dummy-variables; for example, whether or not adding a new attraction causes a certain percent increase in attendance.

The econometric model is used to explain the variance in daily (and weekly) visitor numbers by analysing the variance in other variables inserted into the model. This means that when there is an increase in visitor numbers, the model will try to explain this increase by looking at weather, vacation periods, and all other variables inserted into the model.

The model in its general shape;

$$\Delta \ln \hat{GNV}_{it} = \mu + \sum_{k=1}^{K} A_k \Delta \ln X_{kit} + \Pi \left[\ln GNV_{i,t-1} - \sum_{k=1}^{K} B_k \ln X_{k,i,t-1} \right] + \varepsilon_{it}$$

where Δ denotes the first-differencing operator (e.g. $\Delta y_{it} = y_{it} - y_{i,t-1}$) μ denotes a vector of intercept parameters, X_{kit} is an l-dimensional vector of the explanatory variables k ($k = 1,...,K$) at opening period t ($t = 1,...,T$) of European theme park i ($i = 1,...,T$) and $\varepsilon_{it} \sim N(0,\sum)$. The immediate effect of a change in X_{kit} on the log gross number of visitors is given by $A_k = \frac{\partial GNV_{it}}{\partial X_{kit}} * \frac{X_{kit}}{GNV_{it}} = \frac{\partial \ln GNV_{it}}{\partial \ln X_{kit}}$.

The dynamic effect of a change in X_{kit} on the log gross number of visitors is given by B_k, where $B_k = \frac{\partial GNV_i}{\partial X_{ki}} * \frac{X_{ki}}{GNV_i} = \frac{\partial \ln GNV_i}{\partial \ln X_{ki}}$ for permanent changes in X_{kit} and $B_k = \sum_{j=0}^{\infty} \frac{\partial \ln GNV_{i,t+j}}{\partial \ln X_{kit}}$ for temporary changes in X_{kit}. This means that the dynamic effect of variable X_{kit} is the long run effect of X_{kit} on GNV_{it} if the change in variable X_{kit} is permanent and the cumulative long run effect of $log\, X_{kit}$ on the current and future $log\, GNV_{it}$ if the change in variable X_{kit} is temporary. Moreover, if X_k is a continuous variable, A_k and B_k are log multiplier effects. Finally, the parameter Π is the adjustment parameter and determines the average speed of convergence to the long run relationship (Backx, 2006).

Since no pooled modeling was to be performed, four individual error correction models were composed; one for each participating theme park. These models were produced by first inserting the most important variables one at a time, than judging the outcome of the model at face value and finally judging the outcome of the model in a statistic manner. In doing so, the significance (F-value), R-square, multi-collinearity (VIF-value), auto-correlation (Durbin Watson) and the robustness of the model were monitored and kept within proper boundaries (Field, 2005; Franses & Paap, 2001; Malhotra & Birks, 2000). Subsequently the predictive validity of the models was tested by estimating total attendance for the last year in the dataset based on the data set of the previous years. The predictive validity was 99%, 98%, 98% and 99% respectively for the four analyzed parks.

The following variables were used in the model; weekend days, national holidays, vacation periods, average temperature, total precipitation, opening hours, entrance fee, the addition of a new attraction, the retheming of an existing attraction, the addition of a new show, the occurrence of a special event, the real (i.e. consumer price index corrected) price of gasoline, the real price of highway tolls, the real price of a regular admission ticket for one day, the real price of a children's admission ticket for one day, the real price of a family admission ticket (two adults and two children) for one day, the real price of a parking ticket for one day, the total number of shows and theatre performances, the number of different shows and theatre performances, the number of food & beverage outlets, the number of retail facilities, the number of exhibitions, the number of attractions, the cumulative capacity of attractions, the number of new attractions, the period of time between the opening of new attractions, dummy variables for events such as soccer championships, opening and / or operation of large competitors, the real marketing budget, the real budget for shows and theatre performance, the number of season ticket holders, the real investment in new attractions, average net disposable income of the catchment area, average population of the catchment area. Some of these variables had to be excluded from the analysis due to multi-collinearity problems and percentage of missing cases, depending on the park. None of the four models used the real budget for shows and theatre performances, because for all participating parks these variables were highly correlated with the real marketing budget and/or the real investment in new attractions.

5.2.2. Results of the econometric studies

The modelling results provide various interesting insights. First, by means of dynamic modelling it became apparent that a significant increase in attendance had been recorded in all four theme parks in the year a new attraction was presented to the public. These effects never lasted more than two years; after this period, the effects were no longer significant. The effect in the second year varied between not significant and 65% of the effect in the first year. For park A the effect in the first year was 4% and no effect was found in the second year, whereas for park D the effect in the first year was 10% and in the second year an additional 6.5%. Secondly, it can be discerned from the research results that there were no significant short-term effects regarding new attractions, only significant long-term effects could be established. The most important question on the industry's mind concerns the size of these effects. It is remarkable to note that the average effects of new attractions varied from a relatively low 4% at park A, to a relatively large 10% at park D (see table 24). Furthermore, it is noteworthy that there were (in some cases substantial) differences in the effects of new attractions within parks. In the most extreme case, attraction A in park D was responsible for an increase in visitor numbers of 2% whereas attraction B in the same park D accounted for an increase in attendance of 23%.

These findings raise a number of other questions about the impact of new attractions. How can the large differences in the average effect of new attractions at the different theme parks be explained? What are the contextual factors that determine that park A has an average increase in attendance of 4% in the first year, whereas park D has an average increase that is 2,5 times as high? Furthermore, it is important to know what factors cause the substantial differences in attraction effects within a single theme park. These factors are thought to primarily relate to attraction characteristics (e.g. the meaning of theming, storytelling, the type of ride, etc.), but will also partially relate to the interaction with other controllable and uncontrollable factors. A dark ride has a different effect on attendance than a 3D/4D attraction (Cornelis, 2010b; Van Oest et al., 2010), but it is even suspected that the same dark ride in the same park in a different year will produce a different result. A dark ride will, after all, be evaluated differently during a wet and dreary summer than during a warm and sunny summer. The year of introduction is also related to the so called saturation - and reinforcement effects (Van Oest et al., 2010). To better understand differences like this, it is proposed to develop a so called Attraction Response Matrix (ARM), in which all possible effects of (new) attractions will be recorded and causal relations between all these effects on the one hand and situational factors on the other hand will be related.

Table 24 *Effects of new attractions on attendance in first year, per park (average and extremes)*

	Average	Range
Park A	4%	3%-13%
Park B	8%	5%-15%
Park C	6%	3%-12%
Park D	10%	2%-23%

5.3. Origin of Attraction Response Matrix

The ARM's underlying principle is that an attraction can cause several responses and that these responses are mutually connected. An analysis of on ride video footages, for instance, found that guests are initially relaxed while sitting on the Furios Baco roller coaster, are then stunned and breathless during the launch, exhilarated during the ride itself and finally relieved and excited when returning to the attraction's station. Depending on the guest's expectations of the ride (and other situational and personal factors), a guest is either satisfied or dissatisfied with the attraction (Parasuraman, Zeithaml & Berry, 1994; Zeithaml et al., 2009). This example thus shows that sensory perception and emotional patterns are related; additionally, both are connected to a certain degree of satisfaction. Cole and Scott (2004) examined the mediating role of experience quality in a model of tourist experiences. Their results indicated that tourist experience is cumulative in the sense that performance quality leads to experience quality, which in turn contributes to satisfaction and revisit intentions. Bigné, Andreu and Gnoth (2005), have demonstrated the relationships in a theme park context. They measured the relationship between the theme park experience on the one hand and satisfaction and loyalty on the other. Theme park experience was measured via positive disconfirmation, arousal and pleasure. Their research showed how visitor emotions in a theme park environment influence satisfaction and behavioural intentions. The research of Bigné et al. (2005) is one of the rare studies of the theme park industry that explains the causal relations between mental and behavioural responses.

The ARM is based on the classification by Franzen and Goessens (1998) pertaining to advertising and brands. In the late nineties, Franzen was at the forefront of introducing accountability within the advertising industry. He defines accountability as "establishing a relation between a certain effort and a certain effect, such that one can justify the effect up front and verify the effect afterwards" (Franzen & Goessens, 1998, p.11). Other definitions of accountability pertain to government accountability, education accountability, health accountability, etcetera, yet they are all very similar; the core concept of accountability is being able to justify actions and, to a lesser extent, verify results. According to Franzen, accountability in advertising had become a necessity, because half of advertising budget had no effect; unfortunately, it was unknown which half of the budget was effective and which half was not. He also argued that half of all advertising campaigns did not lead to an increase in turnover for the advertiser, nor to a change in consumer purchasing behaviour. To prevent the unnecessary waste of advertising budget, Franzen developed an Advertising Response Matrix as well as seven advertising working models (Franzen & Goessens, 1998; Van den Putte et al., 1999). In doing so, he provided a strong impulse to the increasing effectiveness and efficiency within the advertising industry (Van der Peet, 2005). According to the American CMO Council, marketers felt that accountability is the key issue within marketing, both in 2007 as well as in 2008 (Stewart, 2009). The growing recognition that marketing should be able to demonstrate the financial returns on investments is also discussed by Ambler (2003) and Lenskold (2003).

While based on the classification by Franzen and Goessens (1998), the actual division into four different levels pertaining to attractions is based on Zaltman Metaphor Elicitation Technique (ZMET) interviews performed in 2005 and 2008. In the next section the method and research design will be explained.

5.3.1. Zaltman Metaphor Elicitation Technique (ZMET)

ZMET is a hybrid methodology grounded in various disciplines, including verbal and nonverbal communication, visual sociology, visual anthropology, literary criticism, semiotics, metal imagery, cognitive neuro-science, and phototherapy, which lends support to the technique's validity and reliability (Zaltman & Coulter, 1995). Martin and Woodside (2008) showed that grounded theory is useful for achieving deep understanding of international leisure travel decisions and tourism behaviours. This is the first time a ZMET-study is applied for the theme park industry. The method involves semi-structured, in-depth, personal interviews centred around visual images that the informant brings to the interview. Because the data are informant-driven rather than researcher-driven, the ZMET-interview affords researchers an opportunity to have consumers more freely express and expand on their thoughts and feelings about the topic under investigation. ZMET is based on the following premises (Zaltman, 1997): thought is image based, not word-based; most communication is nonverbal; metaphor is central to thought; metaphors are important in eliciting hidden knowledge; cognition is embodied; emotion and reason are equally important and commingle in decision making; most thought, emotion, and learning occur without awareness; mental modes guide the selection and processing of stimuli; different mental models may interact. ZMET incorporates the foregoing premises and related insights into an integrated research method. It supports theoretically based designs such as the use of photography and sensory images as metaphors for eliciting non-verbal communication and thoughts (thoughts occur as images), in-depth personal interviews for discovering hidden feelings and thoughts, the Kelly Repertory Grid for validity and reliability, and the laddering technique for eliciting deep constructs (Catchings-Castello, 2000; Chen, 2008; Christensen & Olson, 2002; Coulter, Zaltman & Coulter, 2001; Zaltman, 1996, 1997, 2000, 2003; Zaltman & Coulter, 1995).

5.3.1.1. Preparation of the interview

In this study, we conducted interviews with 23 Dutch consumers to better understand their impressions of attractions. The informant demographics can be found in appendix A. Upon qualifying for participation in the project, participants were provided with a set of instructions and guidelines for collecting images, and a two-hour interview was scheduled. Because a more complete understanding of customers requires tools that engage their nonverbal, especially visual, channels of thought and communication, participants were asked to take photographs and/or collect images from magazines, books, newspapers, or other sources that express for them the thoughts and feelings of certain randomly chosen attractions. Respondents were then asked to take seven to nine images to the interview. Having participants collect stimuli increases the likelihood that important but previously unconsidered issues will be uncovered. Participants were given seven days to collect the images. By affording them time in advance of their interview to process implicitly the images they deem relevant, the pool of important constructs revealed during the interview expands. This processing is likely to be unconscious, though the meanings that result can become explicit during the interview (Zaltman, 1997).

5.3.1.2. The interview

The interviews took place in a comfortable and quiet research room of a Dutch theme park at the end of the summer of 2005 and 2008. Eight extra interviews were added in 2008 to give a better spread of attractions, while the theme park added a major new ride in 2006 and some smaller improvements in 2007 and 2008. The interview started with the participant describing his/her feelings and thoughts about each picture. The interviewer elaborated on each picture by probing unbiased laddering questions. After each picture had been described in detail some other ZMET-steps were taken: respondents had to sort the pictures in meaningful sets and explain this. Afterwards a modified version of Kelly Repertory Grid was used, in combination with the laddering technique, to elicit basic constructs and their relationships. Respondents were asked to discuss the most representative picture, chose and describe opposite images and describe what does and does not capture the taste, touch, smell, sound, colour and emotion of the concept being explored (sensory images). The penultimate exercise was the so called vignette, where the respondent imagines a short movie, adding a movement dimension to the images. Finally the participant created a summary image or montage on the topic. All interviews were tape-recorded and transcribed.

5.3.1.3. Constructs and consensus map

Content coding of the transcripts began by importing the transcribed interviews into the computer software program Atlas.ti. As recurring concepts began to emerge, constructs were created to represent specific categories of meaning and gave the construct a name. Once a final list of constructs was developed, the transcripts were reread and the relationships between constructs were coded. When respondents noted (in their narratives) that two ideas were interrelated, linkages between the relevant constructs were coded. For an example of this process see figure 2.

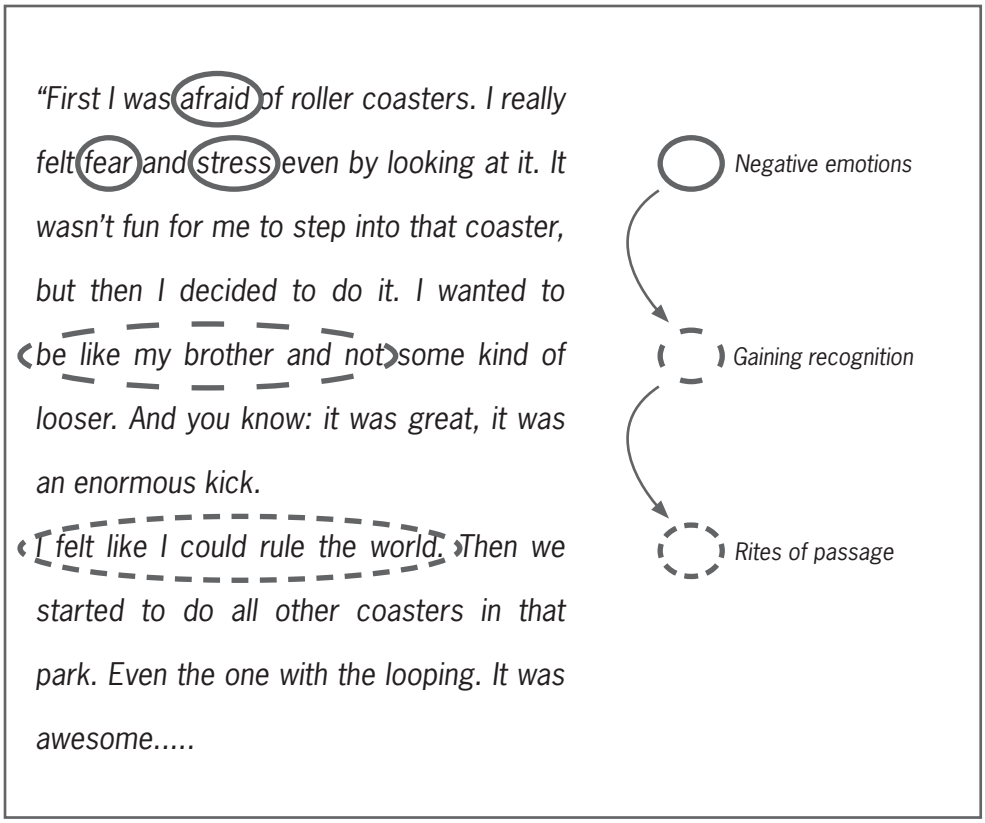

Figure 2 *Content coding of ZMET-transcripts*

It is a relatively straightforward matter to aggregate all the unique construct dyads to create an overall mental model of each participant's thoughts and feelings about attractions. Next the individual–level models were entered into a software program designed specifically to combine the individual mental modes into an aggregate map that represents a consensus mental model across consumers. The program keeps track of how many different respondents connected every pair of constructs. The program is able to produce consensus maps of consumers' mental models at different level of consensus. At a cut-off level of one, every connection between constructs made by any respondent is represented and the resulting map is a mass of links and concepts that is usually unintelligible. As the cut-off is increased (to 2, 3, 4, and beyond), connections and constructs are eliminated and the maps become more interpretable. At some point so many constructs have been eliminated that the resulting map is not interesting. As a rule of thumb, the map usually has a cut-off of about 1/4 – 1/3 the number of study respondents (Reynolds & Gutman, 1988). The cut-off in our research was held at (a conservative) eight, which means that only those linked constructs that were mentioned by eight respondents or more, can be found in the global construct map in figure 3.

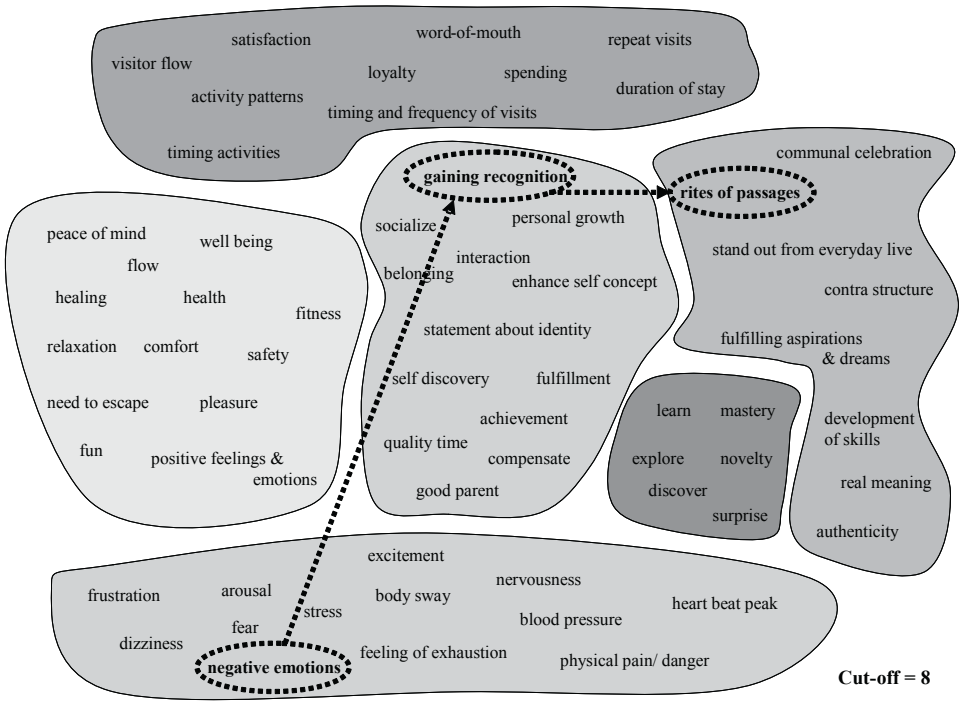

Figure 3 *Construct map ZMET-interviews*

Using a higher cut-off point makes the results more robust and reliable, and easier to interpret. However, in our study the number of constructs is relatively still high. For ease of reading we therefore deleted the individual links and only show the overall consensus constructs. The dotted circles and two links that can be found in figure 3 refer to the example given in figure 2. The ZMET-results give us a better and unbiased understanding of the most important thoughts and feelings concerning attractions in a theme park, and the way they are mutually related, in the way advocated by Parry and Johnson (2007). However, the consensus map still does not give us a thoroughly explanation why the launch coaster in theme park A leads to a 10% increase in attendance, whereas the same launch coaster in theme park B only adds 3% more visitors to the park.

The data were therefore analysed for the second time, this time keeping Franzen's Advertising Response Matrix in mind but translating this to the specific theme park context. It was found that the different constructs in figure 3 could be divided into attraction responses, park responses, brand responses and economic responses. The following quote shows an example of the allocation of the thoughts and feelings to the different dimensions of the Attraction Response Matrix.

"First I was afraid of roller coasters (C1). I really felt fear and stress, even by looking at it. It wasn't fun for me to step into that coaster, but then I decided to do it (C1). I wanted to be like my brother and not some kind of looser. And you know: it was great; it was an enormous kick (C1). I felt like I could rule the world (C1). Then we started to do all other coasters in that park (C2). Even the one with the looping (C1). It was awesome (C1-C2). …. I bought the picture of me and my brother in that coaster (C1-C3) and showed it to my friends (C1-C2). We also got a T-shirt of (name of the characters of the park) (C3). I think we will return by the end of this year (C4). I love this park (C2)."

The references C1 to C4 refer to the response levels of the Attraction Response Matrix shown in figure 4. The constructs that can be found in this figure are related to the quote from figure 2. The Attraction Response Matrix in its general and expanded form can be found in figure 5.

	Pre experience	Direct response	Short term response	Long term response
Attraction response (C1)	• Negative emotions • Excitement	• Excitement • Gaining recognition • Positive feelings & emotions • Fun	• Enhance self concept • Statement about identity • Rites of passage • Activity patterns • Spending	• Enhance self concept • Statement about identity • Rites of passage
Park response (C2)		• Positive feelings & emotions	• Activity patterns • Satisfaction • Spending	• Statement about identity • Repeat visits • Satisfaction • Loyalty
Brand response (C3)			• Spending	
Economic response (C4)			• Timing and frequency of visits	• Repeat visits • Loyalty

Figure 4 *Response levels of Attraction Response Matrix*

Situation (A)			Target Audience (D)	
Attraction characteristics (B)				
Individual response	Pre experience	Direct response	Short term response	Long term response
Attraction Response (C1)				
Park Response (C2)				
Brand Response (C3)				
Aggregated response				
Economic Response (C4)				

Figure 5 *Attraction Response Matrix*

5.4. The Attraction Response Matrix

In the next session, the following components of the contextual approach will be discussed; situation A, attraction B, effect C and target audience D. The time dimension that can be found in the figures 4 and 5 will be discussed as well.

5.4.1. Situation A

As part of charting situational variables, a useable categorisation of theme parks needs to be developed first because this primarily dictates the context in which a new attraction operates. Zukin (1995) distinguishes between 'amusement parks' and 'theme parks'. Amusement parks present many attractions in a relatively small area, each with its own admission price, whereas theme parks offer a limited amount of attractions on a larger, landscaped area. This area does not necessarily have to generate revenue, but visitors pay a fixed entrance fee to enter the park and make unlimited use of all of the park's attractions. This distinction does not, however, provide a useable categorisation of the European theme park industry. Other known categorisations are based on the social background of parks (Davidson, 1998; Davis, 1996; Ford & Milman, 2000; King, 1981; Samuelson & Yegoiants, 2001; Vogel, 2001; Weinstein, 1992), a series of various characteristics such as theming, primary target group and quality standards (Jones & Robinett, 1998; Milman, 1993), size of the park concerning visitor numbers, revenue and square footage, seasonality, type of attractions and ownership of the park (Chassé, 1993; Lanquar, 1991; Sánchez, 1998). However, these categorisations appear to lose sight of the consumer perspective. Leisure is generally associated with freedom, choice and new experiences, contrasting the limitations, predictability and dreariness of everyday life (e.g. Rojek, 1993; Urry, 1990). When applying this knowledge to the theme park industry, several questions arise that first need to be answered; what are the choice alternatives of a consumer looking to visit Disneyland Resort Paris, or the Efteling, or Gardaland? And, above all, what is the underlying categorising dimension of this choice process? Nye's (1981) arrangement of eight different perspective of looking at a theme park could prove to be a valuable basis to answer these questions, as well as Pearce's (1993) proposal for a meaning structure for theme parks. Charting the different types of theme parks will, without doubt, account for a

large number of situational variables, but not all of them. Additional research will need to be performed into the subsequent factors that influence the success of a new attraction. The descriptive study of Pikkemaat and Schuckert (2007) is helpful from the management perspective, but should be replicated in a more contextual way, and would also be more beneficial if it were to be taken the consumer perspective into consideration. The empirical study of Milman (2009) concerning the key attributes of theme parks used the consumer perspective, but was only based on the very specific Orlando Resort parks. It is assumed that this situation is quite different from the European context.

A playground in a theme park dominated by G-forces and white knuckle rides will bring about a different effect than that same playground in a theme park filled with children's rides. A water attraction in a southern theme park (A) blessed with above-average sun-hours and low precipitation will have a different effect than that same water attraction in a theme park (B) located in a wet and mostly overcast location. The difficulty in this situation is to establish which situational factors are of influence. In the example, are the number of sun-hours, precipitation and average temperature the only factors of influence, or do other situational variables come into play as well? It is reasonable to assume that both parks also differ regarding total park capacity in relation to the design day, the balance between rides and shows, the degree of attraction theming, the use of intellectual properties / popular content and / or the number of operating days. Apart from these factors, various non-park related factors have an influence as well, such as the before mentioned temperature, but the degree of competition in the area, the number of residents and tourists in the catchment area, the socioeconomic profile of the catchment area, the ease of access of the park and many other similar factors have to be taken into account as well. Please refer to, among others, Swarbrooke (2002) for more information on relevant, non-park specific factors. What one might wonder is which of these different factors is most distinctive for the differences and similarities between various European theme parks. There will be a degree of commonality between European theme parks, varying from zero to one; zero meaning there is no common ground whatsoever, one meaning that the theme parks are completely similar. The most important criterion in determining the commonality factor is the perception of the potential theme park visitor (Cornelis, 2008). To forecast the effects of a future new attraction for Park A, the best bench mark would be one between Park A and a theme park with a commonality factor as close to one as possible.

5.4.2. Attraction B

The most obvious factor influencing the effect of a new attraction on attendance is, naturally, the attraction itself. However, classifying attractions has proven to be a very complex and seemingly impossible task. Whereas it is apparent that a roller coaster is a different attraction type than a carrousel, it becomes increasingly intricate to objectively specify the difference – if any – between a carrousel and a wave swinger. Both are generally considered to be family rides, both occupy a small footprint, both entertain through a circular motion. Should these two attractions be considered to be of the same type, or should they be seen as two different types of attraction?

Various classifications of attractions can be found in the academic literature. Wanhill (2008b), for instance, distinguishes between me too attractions, grand inspiration attractions, new version attractions and wonder attractions. Brown (2002) discusses several characterising aspects of theme park attractions, including movement, sound, the visual landscape and story. Even though these characterising aspects can be used to describe certain attributes of attractions, they do not form a classification as such. They can, however, be used as a guide when developing a classification. Anton

Clavé (2007) determines the following main categories; roller coasters, dark rides, flat rides, water attractions and educational attractions. He also distinguishes two different types of shows; animations and audio-visual and film presentations. Simulator rides and 3D/4D attractions should, according to Anton Clavé, not be considered to be attractions, but shows. Van Oest et al., (2010) used the distinction between thrill rides and themed rides.

Apart from these main academic classifications, the theme park industry adheres to a certain classification as well. General informal classifications include broad terms such as roller coasters, flat rides, children's rides, water rides, dark rides and several other broad categories. A category such as roller coasters can, however, be classified even further into categories such as launched roller coasters, indoor roller coasters, inverted roller coasters, suspended roller coasters, flying roller coasters, wild mouse type roller coasters and an endless supply of other typologies. Even though adhering to these informal classifications can be treacherous, because of the large number of categories, it has its advantages as well. The main advantage is that this classification is flexible, and new categories appear as new attraction types make their appearance in the industry.

Regarding the research into attraction characteristics, the challenge lies in the fact that creativity is hard to categorise and that we will most likely encounter what McLuhan (1965; as cited in Stappers, Reijnders & Möller, 1990) once called the horseless carriage syndrome. We are accustomed to place new developments into our old and familiar frame of reference. According to McLuhan, we view the present from the rear-view mirror and thus march into the future backwards, doing new ideas injustice. We could attempt to overcome this pitfall by interviewing experienced imagineers and visionaries from the industry and using their insights in demarcation the attraction classification. On the other hand, new developments are generally difficult to categorize in the beginning, but over time, this problem will resolve itself. To illustrate, when the Villa Volta attraction in the Efteling opened in 1996, it was a unique attraction concept, barely comparable to its predecessors which paled in comparison with the size and experience of Villa Volta (Vanden Diepstraten, 2002). There was no categorisation for this type of attraction, however, when more similar attractions opened in various European theme parks, the name 'madhouse' was attached to this specific type of attractions. A madhouse is a seemingly rotating house like Hex in Alton Towers, Curse of Kassandra in Europa-Park, Le Defi de César in Parc Asterix and Magic House in Gardaland. The problem of not being able to categorise Villa Volta thus solved itself over time (when more similar attractions opened and a category name came in use).

The vast number of factors that have to be taken into account when developing an exhaustive yet clear categorisation for theme park attractions poses a considerable challenge. The existing categorisations are, according to the author, not usable due to the earlier mentioned reasons. An appropriate categorisation should be exhaustive as well as unpretentiousness; the number of categories should cover all possibilities, but at the same time should not be that numerous that it is no longer convenient to work with. The final goal of the categorisation is to use it as a tool to compare historical data of similar attractions to predict the success of new attractions. Van Oest et al., (2010) concluded that thrill rides performed better for the Efteling theme park than themed rides. Is it possible that this result is a spurious one, caused by the fact that the classification used was not the appropriate one? What if the PandaVision (a 3D/4D attraction in the Efteling) could indeed be better classified as a show, as Anton Clavé suggests, instead of a themed attraction, as Van Oest et al. propose? In that case the final conclusion of Van Oest et al. would no longer be so certain. According to Van Oest et al. PandaVision is a themed attraction with a negative ROI. With only seven themed attractions in their

dataset this negative ROI of one of the themed attractions has an unknown effect on the average impact of themed attractions. The author invites the reader of this article to come up with a categorisation that fits this goal.

5.4.3. Effect C

In the ZMET-study the most important primary effects and their mutual relations were analysed. The study on the effects of new attractions can be elaborated. Based on an extensive literature study, the most important effects of new attractions have to be mapped and be compared with the ZMET-constructs. The goal is not to cover all possible effects, but to distinguish between primary and secondary effects. In a second phase, certain effects can be looked at in more detail and more exhaustively. The four response levels are; attraction response, park response, brand response and economic response, as can be seen in figure 4.

The attraction response category (C1) deals with the physical / sensory, emotional, spiritual, intellectual, mental and behavioural responses of the individual consumer on the attraction / the theme park area during and directly after the confrontation, as well as a reasonable period afterwards. This categorisation is a combination of the categorisations of O'Sullivan and Spangler (1998), Pine and Gilmore (1999) and Schmitt (1999). When referring to experience, Pine and Gilmore (1999) specify emotional, physical, intellectual and spiritual; Schmitt (1999) distinguishes between sense, intellectual, feeling and body and O'Sullivan and Spangler (1998) specify emotional, physical, mental, social and spiritual. Possible responses are attraction reputation, attitude towards attraction and / or lived area experience.

The park response category (C2) deals with similar responses as the previous category, but relating to the theme park in general. One could think of affiliation with the theme park, duration of stay, number of visits to F&B outlets, amount spent on merchandising.

The brand response category (C3) deals with changes in brand familiarity, brand associations, brand values, brand positioning, brand relation, attitude and behavioural intentions towards the brand; that can be (partially) caused by contact with the attraction. Other related factors are the consequent search for information in the orientation phase, the actual purchasing behaviour, the degree of brand loyal purchasing behaviour and, in some situations, the usage behaviour (frequency, usage moments) and / or the termination of usage behaviour. All regarding the brand, meaning to what extent is a consumer willing to purchase Disney merchandise, request information regarding PortAventura accommodation and the intensity and frequency with which the Efteling computer games are played. The brand response is, opposed to the park response, not relevant for every theme park. For many parks the brand response will be equal to the park response, because the brand value is insufficient to add anything to the tangible product.

In the end, the theme park industry is interested in the economic effects (C4), which means that industry professionals want to know what the effect of a new attraction on turnover, market share, average per cap revenue, the price premium a consumer is willing to pay, price elasticity, turnover stability, profit margin, profit, return on investment and cash flow will be. In essence, the economic response is no more than the individual behavioural responses aggregated at a market level (Franzen & Goessens, 1998).

5.4.3.1. Temporal Dimension

As can be seen in figure 4, a distinction regarding time has been made as well (on the horizontal axis). This is because the response to a stimulus can be seen as the sum of consecutive effects over time, as previously explored by Le Bel (2005). Le Bel considers such a model to be a dynamic instead of a static model. Several other authors discuss dynamic effects as well (e.g. Celsi, Rose & Leigh, 1993; Dube & Le Bel, 2003; Dube & Menon, 2000; Fournier & Mick, 1999; Otto & Ritchie, 1996; Quan & Wang, 2004). However, these authors discuss the dynamic effects of the experience as such, whereas Le Bel (2005) places the effects in a broader temporal frame (making a distinction between three consecutive phases: the joining phase, the intensive phase and the detachment phase). Otto and Ritchie (1996), for example, argue that a certain attraction can cause several types of emotions, which can be related to each other. This would mean that there is a certain dynamic within one single cell. Le Bel (2005), on the other hand, argues that there indeed is a certain dynamic, yet not within a cell but between cells. The customers' psychological needs and states in the joining phase (like anticipation or anxiety) can for example be connected to the psychological needs and states in the intensive phase (like relaxation/rest or peace). Additionally, research by Bigné et al. (2005) also shows that there are dynamics during the experience, yet they implicitly discuss dynamics between cells as well. Both types of dynamics – both within cell and between cells – are included in the ARM. The between cell dynamic can primarily be found in the temporal dimension and in the relation between the different levels of effects.

The pre-experience effects relate to expectations. Direct effects relate to the response during and immediately after the confrontation with an attraction or themed area. Short term effects relate to responses as a consequence of one or several attractions (within an area), until effects can no longer be reasonably established. The short term effect at attraction level lasts no more than half an hour. The long term effect lasts between half an hour until approximately three days after the confrontation / exposure. The short term park effect lasts as long as the return trip home and the long term park effect lasts approximately one week. In the case of the brand effects, the short term effect lasts no more than one year, the long term effects can last several or even dozens of years (in accordance with Franzen & Goessens, 1998).

5.4.4. Target Audience D

Strictly speaking, the target audience does not belong to the ARM. However, given the importance of a contextual approach, as stated in the premise of this article *"in situation A, attraction B will most likely lead to effect C on target audience D"* the results of the ARM should be considered in relation to the target audience. A mega roller coaster will have a different effect on experienced thrill seekers than it will have on families with young children. But what are the most relevant criteria for segmenting the theme park market? From a broader tourism perspective many recent (meta)studies concerning segmentation can be found (Boo & Jones, 2009; Li, Huang & Cai, 2009; Park, Reisinger & Kang, 2008; Weaver, McCleary, Han & Blosser, 2009). However, there are only a handful of relevant studies which are public available for the theme park industry in particular. Most of these studies are a direct translation and application of segmentation criteria that can be found in general marketing literature, such as segmentation based on geographic, demographic, socioeconomic, psychographic and behaviouristic variables (Kotler & Keller, 2006; Swarbrooke, 2002). Fodness and Milner (1992) have published a study on this subject; they used a perceptual mapping approach to segmenting the theme park market, based on parks in Orlando. McClung's (1991) work is useable to a lesser extent, as he compared the demographic profile of theme park visitors in the United States to the demographic profile of non-visitors. Research by Darnell and

Johnson (2001) and Kemperman, Joh and Timmermans (2003) shows the relevance of a distinction between first time versus repeat visitors. The degree of variety seeking also influences a consumer's behaviour regarding theme parks (Kemperman, Borgers, Oppewal & Timmermans, 2000).

5.5. Conclusion and discussion

Attraction accountability is an important topic for the theme park industry. The amount of money spent on new attractions appears to increase annually and research into the effects of these investments is sparse. The studies of Cornelis (2008, 2010b) and Van Oest et al. (2010) show the effects of certain new attractions in hindsight. The Attraction Response Matrix attempts to transform this a posteriori knowledge into a priori knowledge by better understanding the impact of a new attraction and its' mediating causes. The ARM described in this article is a first conceptual approach to better streamline the research into the influence of new attractions on attendance. The matrix attempts to offer an integrated framework in which research into the effects of new attractions can take place in a systematic manner.

The results of Cornelis' study showed a 23% increase in attendance for a certain new attraction in park D in the first year the attraction was added (a dark ride) and an only low 2% increase for another attraction in the same park in a different year (a 3D/4D show). The growth in annual attendance would be described as an economic long term effect (C4). It is one of the key indicators of success for a theme park. If we have a look at the revenue break down for theme parks and amusement parks it shows that 60% of the revenue for European theme parks is generated by the admission fees. For large amusement parks this is only 40%, whereas for small amusement parks it is 80% (ERA/AECOM, 2009). Based on these figures the ROI, cash flow and other important economic and financial metrics of these new attractions can easily be calculated (Liu, 2008; Roth, 1994). In the study of Van Oest et al. (2010) the worst performing attraction for the Efteling over the last 25 years was also a 3D/4D-show. The best performing attraction in their study was a thrill ride. The 3D/4D-show turned out to have a negative ROI of 22%. For a priori knowledge we should better understand why this attraction had a negative ROI of 22%. It can be caused by many things. One of the reasons could be that 3D/4D-shows are amongst the least preferred attractions in a theme park. However, this would be jumping to conclusions, simply based on the coincidence that the low performing attractions in both studies were a 3D/4D-show. What if either attractions were the latest new additions to the theme parks or they were both meant for a new target audience for the theme parks? We then might conclude that it is no longer worthwhile to add new attractions to the theme parks under investigation, because they have reached their maximum attendance level or it is not interesting to target to new audiences in the first place? To have a better insight we therefore need to know more about the real causes of the success or failure of a new attraction. By using the Attraction Response Matrix as a guiding instrument we could work in a systematic and integrative way. We might still not find all the reasons for success or failure of new attractions, because of the 'intangible magic', but at least we can lessen the uncertainty and eliminate wrong and spurious conclusion. For example a study based on the Zaltman Metaphor Elicitation Technique (Cornelis, 2008) has shown that the difference between the least and most successful attraction was explained by their fit with the most important brand associations; the so called brand response (C3). The 23% attraction had a perfect fit with the brand, whereas the 2% attraction had a poor fit. Whether this is the only or main reason for the difference between the two attractions, and whether this also counts for the 3D/4D-show in the other park, remains to be seen. The effects and relations mentioned above were after all distinguished within a certain context (being attraction B, at park A, for target audience D). More research would be needed. At least we now have some alternative

explanations for further investigation, so spurious relations and conclusions can be avoided. When we are capable of specifically describing the context in a detailed and concise manner as to generalise the results to other situations, it will facilitate forecasting and enable us to generalise the knowledge to other and new situations, finally bringing accountability of new attractions one step closer to reality.

Even though the design of the ARM and the underlying assumptions regarding a conceptual approach to the accountability predicament are clear and concise, the filling in of the matrix will be receptive to change because of ever-growing insights. By researching the relevant effects within certain cells and consecutively investigating the relationship between the various cells, a better insight will be gained in the workings of new attractions. This information can and should be used to further improve the ARM. Research will thus have to be performed into possible relevant effects of new attractions, the factors that are crucial in determining the situational context, a perceived categorisation of attractions that is relevant from a visitor's point of view and, finally, the criteria based on which the target audience for the theme park industry can best be segmented. It is not the least of challenges, but it will have to taken up in a systematic manner if we have the desire to achieve more reliable forecasts of the future effects of investments in new attractions. For the time being, the theme park industry is struggling with attraction accountability, but if we tackle the challenge as a team effort, if we build and share knowledge in a systematic manner, the uncertainty regarding new attractions will decrease over time.

Chapter 6 *Effects of co-branding in the theme park industry, a preliminary study*

More and more firms and other organizations have come to the realization that one of their most valuable assets is the brand names associated with their products or services. In an increasingly complex world, individuals and businesses are faced with more and more choices but seemingly have less and less time to make those choices. The ability of a strong brand to simplify consumer decision making, reduce risk, and set expectations is thus invaluable. Creating strong brands that deliver on that promise, and maintaining and enhancing the strength of those brands over time, is thus a management imperative. (Keller, 2003b, p2) Although increasing in activity in recent years, academic research in branding has a long tradition. Much, however, remains to be learned. One area of increasing importance is the brand-leveraging process (see table 25 for definitions of key terms), that is, the effects on consumers of linking a brand to another person, place, thing, or brand. Marketers often attempt to increase their brand equity by, in effect, borrowing equity from others. (Keller, 2003a, p.595)

6.1. Introduction to co-branding

Over the past few years, more and more brands have engaged in brand alliances with one another to strengthen their brand equity (Blackett & Boad, 1999; Cooke & Ryan, 2000; Grossman, 1997; Leuthesser, Kohli & Suri, 2003; Levin & Levin, 2000; Motion, Leitch & Brodie, 2003; Sengupta & Bucklin, 1995; Uggla, 2004; Wasburn, Till & Priluck, 2000). The increased interest in brand alliances is not an isolated incident, according to Jansen (2004); "The present trend to be discerned is that organisations form alliances more often because they are looking for new ways to (once again) offer added value to the consumer. After all, many brands find themselves in a crowded market nowadays, and brands therefore need to search for new possibilities to achieve autonomous growth" (p.14). By working together, organisations attempt to develop new and inspiring concepts for consumers in order to achieve an advantage over their competitors (Blackett & Boad, 1999). Given the power of brands as strategic assets, and the strategic value of alliances in today's global marketplace, it is clear that brand alliances will continue to remain a powerful strategy for growth (Cooke & Ryan, 2000).

6.1.1. Definition of co-branding

There is no universally accepted definition of brand alliances. Brand alliances appear in many different shapes and sizes and therefore a vast array of concepts describing the various forms of brand alliances can be found in the literature, such as co-branding, joint marketing, joint branding, sponsoring, product placement, ingredient branding, lean-on marketing, joint venture, joint promotion and composite brand extension (Blackett & Boad, 1999; Cooke & Ryan, 2000; Jansen, 2004; Leuthesser et al., 2003; Park, Jun & Schocker, 1996; Wasburn et al., 2000). In this article the term co-branding is used. Defined broadly, co-branding has been described as all circumstances in which two or more brand names are presented jointly to the consumer, for short albeit long term (Rao & Ruekert, 1994) or any pairing of two brands in a marketing context such as advertisements, products, product placements and distribution outlets (Grossman, 1997). More narrowly defined, co-branding means the combination of two brands to create a single, unique product (Park et al., 1996; Wasburn et al., 2000). This latter, narrower, definition of co-branding will be used in this chapter.

Table 25 *Key terms branding*

Brand leveraging	Linking a brand to another person, place, thing, or brand (Keller, 2003b)
Co-branding (broadly defined)	All circumstances in which two or more brand names are presented jointly to the consumer, for short albeit long term (Rao & Ruekert, 1994) or any pairing of two brands in a marketing context such as advertisements, products, product placements and distribution outlets (Grossman, 1997).
Co-branding (narrowly defined)	The combination of two brands to create a single, unique product (Park et al., 1996; Wasburn et al., 2000).
Brand representation	A brand representation is the brand specific collection of product-, brand- and consumer-related attributes (consisting of all knowledge of and feelings towards a brand) which an individual holds in long term memory, (a subset of) which incidentally and/or intentionally becomes active in working memory in a moment-specific configuration, dependent on activation cues, activation context, and personal dispositions (Timmerman, 2001).
Brand associations	All information that is associatively connected in the brain with the brand name (brand attributes) (Franzen & Van den Berg, 2002).
Core associations	Core associations are those attributes based on which the brand is positioned in the mind. They are the first responses that come to mind when one is confronted with a brand (signal) (Franzen & Van den Berg, 2002).
Brand assets	Brand assets are those attributes that have a positive relationship with buying behaviour (Franzen & Van den Berg, 2002).

6.1.2. Co-branding in the theme park industry

Co-branding in the hospitality industry has existed in one form or another since the 1930s. But it was not until the 1980s, when Red Lobster opened two restaurants in Holiday Inn properties that this idea became popular (Yip, 2005). In recent years, service industries such as restaurants and hotels have recognized the success of co-branding strategies (Lee, Kim & Kim, 2006) and within the specific field of hospitality management the interest in co-branding continues to increase as witnessed by its ever-expanding coverage in trade-journal articles (Boone, 1997; Lee et al., 2006; Levin & Levin, 2000; Uggla, 2004; Young, Hoggatt & Paswan, 2001). In the service sector, the leader brands often appear as organizers of meaning from partner brands. Co-branding is a very often used strategy in the theme park industry (Ralph, 2009; Uggla, 2004). A sign of this strategic direction is that most theme parks now have their own partner brand managers that develop platforms and conditions for brand alliances. “What operators like Disney and Universal have known for a long time is that incorporating well-known brands and characters into theme park attractions creates the ultimate cross-marketing opportunity. Now numerous other license owners are waking up to the potential parks have to create real life experiences that immerse guests deeper into the brands or intellectual property” (Ralph, 2009, p.30). All theme parks have (official) partners and many theme parks even develop rides and attractions in collaboration with those partners, like PandaVision (Efteling-WWF), Silverstar (Europa-Park-Mercedes), TestTrack (Disney Epcot-General Motors) and Driving school (Legoland-Fiat), just to mention a few. This article will be about the impact of a co-branded attraction in theme park Efteling (in the Netherlands).

6.1.3. Objective and structure of this chapter

The objective of this study is to investigate whether the relationship with WWF, resulting in the co-branded attraction PandaVision, could have a negative effect on the strong brand associations of Efteling. For this study the unaided IBRA research method is used, to prevent research biasing that might have occurred in former co-branding studies. The paper is structured as follows. Section 6.2 provides a literature overview of co-branding, the effects found so far and the discrepancy between theory and empirical evidence. Section 6.3 provides a theory of branding and its relation to behaviour. In this section the IBRA-method will be introduced. Section 6.4 is about Efteling and branding. This is the section where the PandaVision will be introduced. Section 6.5 outlines the research hypothesis and –design. Section 6.6 presents the results and section 6.7 offers the conclusions and managerial implications, along with some areas for future research.

6.2. Literature review of co-branding

Blind taste tests have often been used in brand research (Keller, 2003b). With blind taste tests, one group of consumers samples a product without knowing which brand it is, whereas another group of consumers samples the product knowing which brand it is. Invariably, differences arise in the opinions of the two groups despite the fact that the two groups are consuming the same product. This basic assumption also holds for co-branding in theme parks. Consumers would have different opinions about the mega coaster Silverstar (Europa-Park Germany) if it were not be developed in cooperation with Mercedes, but instead with Kia or Lada. Most partner brand managers in theme parks would agree that it would be better to connect their ride to the former brand. The perceived quality of Mercedes is higher than the perceived quality of Kia and/or Lada, and there probably would also be a better fit between the brands, being both German brands. Most practitioners and academics believe there should be a fit between the co-brands (Sengupta & Bucklin, 1995).

Notwithstanding the growing interest for co-branding in the theme park industry academic research in a theme park context has not been found yet. Empirical research on co-branding is limited to a relatively few studies that have typically examined product concepts or fictitious products rather than real instances of co-branding (Lee et al., 2006; Leuthesser et al., 2003; Rao & Ruekert, 1999). Most of the literature of co-branding simply describes the strategy or discusses the advantages and disadvantages of co-branding arrangements (Wasburn et al., 2000). Only a few studies have been conducted on the effects of co-branding. Park et al. (1996) combined existing brand names to create a Composite Brand Extension or CBE, analogous to a co-brand, and examined how consumers form the concept of the CBE based on their concepts of the constituent brands, the roles of each constituent brand in forming this concept, and the effectiveness of the CBE strategy. Simonin and Ruth (1998) reported research that examined consumer attitudes toward brand alliances (co-brands) that focussed on spill over effects of brand alliance evaluations on the later evaluations of partner (constituent) brands and on the role of brand familiarity in these relationships. Wasburn et al. (2000) investigated the impact of co-branding on the brand equity evaluations of both the co-branded product and the branded products that comprise it. Their research studied the effects of co-branding on the brand equity of both the original branded products and the resulting co-brand both before and after product trial.

6.2.1. Effects of co-branding

Based on the preceding effect studies, the following research findings can be presented:

- Co-branded products can acquire the salient attributes of both parent brands, making co-branding a particularly attractive alternative to brand extension where the parent brands complement each other strongly (Park et al., 1996; Simonin & Ruth, 1998)
- Perceptions of a co-branded product can have spill over effects on the parent brands; lesser known parent brands are likely to be affected the most (Simonin & Ruth, 1998).
- Strong parent brands influence the perceptions of co-brands more than weaker parent brands, and strong parent brands are less influenced by attitudes towards the co-brand (Simonin & Ruth, 1998).
- Pairing a 'high-status' parent brand with a 'low-status' parent brand is not necessarily detrimental to the high-status brand (Park et al., 1996).
- Low equity brands gain more in a co-branding situation than high-equity brands, but do not damage the high-equity brands they partner with (Wasburn et al., 2000).
- The act of pairing with another brand may lend credibility to the constituent brand, even when one or both of those constituent brands are perceived as having low brand equity (Wasburn et al., 2000).
- High equity brands appear to not be diminished by their pairing with low equity brands thereby offering protection from poor co-branding decisions. This positive impact affects both the co-branded product and the brand equity of each co-brand partner (Wasburn et al., 2000)
- The only brands not enhanced by co-branding are those with well-entrenched, long-standing positive images. Nevertheless, these brands are not negatively affected by co-branding (Wasburn et al., 2000).

6.2.2. Discrepancy between theory and empirical evidence

Although the results mentioned above do not clearly show any particular risks of co-branding for strong brands, "managers should use extreme care in forming brand alliances" (Rao & Ruekert, 1999, p.266)'. Co-branding comes with a variety of risks, it presents opportunities as well as dangers (Blackett & Boad, 1999) and in the co-branding arena there are both success stories and dismal failures (Grossman, 1997). Most notable is the risk of pairing with a partner that can damage the existing product's strong equity. Through co-branding, two brands can be linked together. These links can enhance or detract from consumers' perceptions of each constituent brand (Keller, 2003a; Park et al., 1996; Simonin & Ruth, 1998; Uggla, 2004). Besides, the literature on disconfirmation of expectations suggests that high equity brands will retain their positive evaluations in the event of a positive product trial, but will lose ground in the event of a negative product trial (Wasburn et al., 2000).

The study of Wasburn et al. (2000) only investigated a positive product trial, so the hypothesis about losing ground in the event of a negative and/or ambiguous product trial is still to be tested. In addition their study does not support the belief that a high equity brand would be denigrated by its pairing with a low equity brand. "It seems that the rich association set that accompanies a high equity brand may insulate it from a less favourable association" (Wasburn et al., 2000, p.600).

It looks like there is a discrepancy between the co-branding effect literature, that warns for the possible risks of co-branding in negative spill over effects, erosion, brand dilution and even negative

bottom line effects for the participating brands (Blackett & Boad, 1999; Franzen & Van den Berg, 2002; Grossman, 1997; Keller, 2003a; Park et al., 1996; Rao & Ruekert, 1999; Simonin & Ruth, 1998; Uggla, 2004; Yip, 2005) and the public available empirical data, reported in section 6.2.1., that does not really show these effects (Park et al., 1996; Simonin & Ruth, 1998; Wasburn et al., 2000); at least not for strong brands. A reason for this discrepancy could be the way the three effect studies mentioned above are organized.

6.3. Theory of branding and its relation to behaviour

Hankinson and Cowking (1995) studied the most common definitions of brands in scientific literature and marketing magazines. They came to the conclusion that the word brand can be approached from at least six different perspectives: visual, perceptual, positioning, added value, image and personality. According to Timmerman (2001), the diversity in brand definitions reflects the various interest groups dealing with brands. Each interest group defines a brand in manner most suitable to their purposes. A legal department will emphasise the legal protection of a brand and therefore be most interested in a visual definition. The marketing department, on the other hand, will be more interested in the positioning and added value of a brand. Market and brand researchers have a need for the analysis of a brand and its presence in the minds of consumers and will therefore be more interested in definitions pertaining to the composed areas of the brand, the image and the personalities of a brand. In this article, primary emphasis will go out to memory representations of a brand and thus consumer representations. Timmerman (2001) defines brand representations as follows;

A brand representation is the brand specific collection of product-, brand- and consumer-related attributes (consisting of all knowledge of and feelings towards a brand) which an individual holds in long term memory, (a subset of) which incidentally and/or intentionally becomes active in working memory in a moment-specific configuration, dependent on activation cues, activation context, and personal dispositions. (p.81)

Brand representations manifest in different shapes and sizes. Franzen and Van den Berg (2002) distinguish between brand associations, core associations and so-called brand assets, based on the strength of the associations and the eventual influence of the associations on behaviour towards the brand. Brand associations are described by them as all information that is associatively connected in the brain with the brand name (brand attributes). Core associations are those attributes based on which the brand is positioned in the mind. They are the first responses that come to mind when one is confronted with a brand (signal). Brand assets are those attributes that have a positive relationship with buying behaviour. Not all brand associations within a brand representative system thus belong to the core associations and, alternatively, not all core associations are brand assets.

Another possibility are ‘negative brand assets’, brand definitions that are evaluated negatively and are ‘reasons’ to not purchase a brand. In the case of Efteling, a consumer might think of, for example, Pardoes, Pardijn and perhaps even of Paddeltje and Pietertje Muis. Pardoes is Efteling’s central character, much as Mickey Mouse is Disneyland’s central character. The Pardoes family further constitutes of his female friend Pardijn, baby Pardotje and several lesser known characters such as Paddeltje the living mushroom and Pietertje Muis, a little mouse. Only Pardoes and Pardijn make regular appearances at the theme park. Pardoes can be seen as a core association because this particular association will be one of the first responses for the majority of consumers. Paddeltje and Pietertje Muis are general brand

associations, because they have a smaller role in determining actual visiting behaviour for Efteling. To small children, the association with Pardoes might be a brand asset (they will ask their parents to once again visit Efteling because they would like to shake hands and cuddle with Pardoes). To teenagers, Pardoes could be a negative brand asset. The first response for Efteling would be Pardoes, supporting the assumption that Efteling is primarily suited for small children. Therefore these teenagers would, for instance, decide to visit amusement park Walibi World instead.

6.3.1. Measuring brand associations

The meaning of a brand can result from any observation of or any experience with the brand. Every contact with the brand, however small, can form associations in the mind (Keller, 2003b). Research into brand representations is hindered, according to Timmerman (2001), because research agencies involved with charting brand associations primarily look after the continuity of their own organisation. In attempts to share in the profit new market research agencies and new methods frequently enter the market. Timmerman claims the outcome of this situation is a staggering 70 different methods of brand association charting in the Netherlands alone. Timmerman continues by warning that not every method is relevant for each brand. A brand which is purchased primarily because of its functional qualities will not benefit much from extensive research into the symbolic brand associations or brand personality. In the latter case, the consumer will be asked about brand personality of the brand at hand and will come to a number of personality characteristics based on this cue. Whether or not these characteristics were truly connected to the brand in the consumer's long-term memory or whether they wound up in the short-term memory because of the manner of questioning (the so-called cueing-effect) remains to be seen. Management could proceed with an unnecessary of false intervention in the brand strategy based on this false information, which can eventually lead to negative consequences for the brand. Therefore, Timmerman (2001) proposes measuring brand representations in an unaided way, so only ask for free association, and then afterwards classify them in certain categories.

6.3.1.1. Inventory of Brand Representation Attributes (IBRA)

Several authors have made inventories of the various brand association categories that can be distinguished. In Dutch brand literature the Brand Associative System by Franzen and Goessens (1998), the brand identity prism by Kapferer (1997) and the categorisations by Aaker (1991) and Keller (2003a) are often referred to. Based on an analysis of these and other studies, Timmerman (2001) developed the Inventory of Brand Representation Attributes (IBRA). In the IBRA, Timmerman distinguishes between 56 different brand attributes that have been reduced into three main groups and ten subcategories. The classification into main groups and subcategories are graphically displayed in figure 6. According to Timmerman, a brand representation can be divided into three main categories of attributes; product related attributes, brand related attributes and consumer related attributes. These main categories subsequently consist of a number of subcategories. Figure 6 shows, for example, that the main category product related attributes consists of the subcategories product characteristics and product use. Product characteristics are further divided into product indication (class, type, variations etcetera) and product physique (like shape, colour, smell, tactual, sound, taste, ingredients/composition, product history). Brand related attributes are divided into brand identifiers, price/quality, brand personification, market, organization, advertising. Just to give an example of one of them: brand personification consists of brand personality, values, brand ideology, consumer brand relationship, affection, impressive and expressive self image and brand user image. Consumer related attributes are divided into attitudes & purchase behaviour and personal references. The full inventory of brand attributes can be found in

appendix B. Research of twelve brands based on free association technique with 300 respondents resulted in a total of 4583 associations, 98,7% of which could be classified in IBRA. This research demonstrates that IBRA is a sufficiently exhaustive inventory of association categories (Timmerman, 2001).

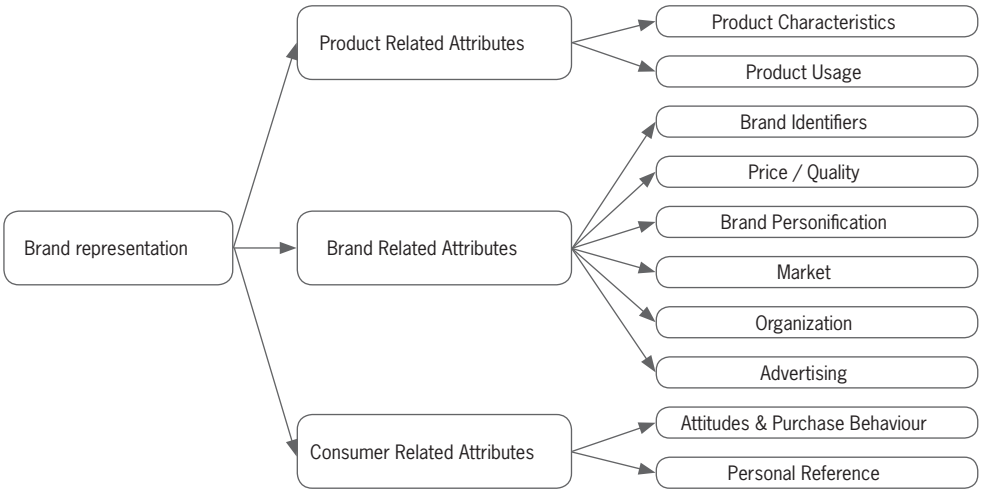

Figure 6 *Inventory of brand association categories*

6.4. Efteling and branding

Efteling is the largest theme park in The Netherlands, and as it opened in 1952, it is one of the oldest theme parks in the world. Efteling is located in the town of Kaatsheuvel, in the south of Holland. In 1992 Efteling received the IAAPA Applause Award for Best Amusement Park in the World. Originally the park catered for children with a fairy tale theme. In over fifty years the park has evolved from a nature park with playground and a Fairy Tale Forest, into a full-size theme park along the lines of Disneyland. Nowadays Efteling appeals to both young and old with its cultural, romantic and nostalgic themes and its variety of amusement rides. Efteling has been divided in five sections; the theme park (1952), the four-star Efteling Hotel (1992), the 18-hole golf course (1995), the theater (2002) and the holiday park with bungalows which is about to be built. Not only the Fairy Tale Forest, but almost the entire Efteling park was built in a rather rural area, with lots of pine trees, giving it a 'nature park' feeling. Together with the large ponds and gardens (with thousands of flowers, and maintained by an army of gardeners), the park's abundant green space is rather unusual among the world's leading theme parks (Vanden Diepstraten, 2002).

6.4.1. The significance of branding for Efteling

Efteling adheres to a so-called three-track policy (Cornelis, 2005; Efteling, 2007). Apart from an emphasis on the company's current and future activities, Efteling's board of directors also acknowledges the importance of future expansion and development of the 'Efteling brand' (Wiering, 2008). This emphasis originates from the knowledge that Efteling evokes a large number of pleasant and positive associations which could be well used for further expansion of the brand (Van Assendelft de Coningh,

1995). Aside from these so-called management advantages a strong brand also offers financial and strategic advantages for the brand owner (Riezebos, Kist & Kootstra, 2003). Examples of these advantages are a higher sales level, improved margins, guarantees for future income, a stronger position towards suppliers and an advantageous position in the labour market. Especially this latter aspect is of great importance for companies within the leisure and theme park industries and is one of Efteling's central secondary motivations for brand investments.

6.4.1.1. Primary brand functions of Efteling

Consumers use brands for various purposes. For both brand policy as well as brand communication it is important to have an insight into the primary function(s) the brand has according to consumers (Franzen & Van den Berg, 2002). Research into Efteling's primary brand functions (Cornelis, 2003) concludes that the security function (a specific attainment of the purchasing behaviour function) is of great importance. Efteling ensures a successful, pleasant and carefree day because of the associations with excellently looked after attractions, kind staff members, a natural décor, etc. This security is primarily dictated not so much by symbolic brand associations, but by the fact that the Efteling brand represents associations with the product. The importance of the security function explains Efteling's interest in the effect of co-branding on perception and overall evaluation of the Efteling brand. What effect does collaboration with other brands have on the associations regarding the Efteling brand? Does collaboration create new associations? Will a brand alliance change the evaluation of existing associations, potentially undermining the security function, or will existing associations become even stronger?

6.4.2. Efteling and co-branding

Efteling currently distinguishes between five different co-brand partners, being partners in quality, joint promotion partners, partners regarding the Efteling Hotel's themed suites, partners of the Efteling Golf Course and finally partners in theatre and media productions. The company's current partners in quality are Coca Cola, Rabobank, WWF, Ola, Frieslandfoods, NS (Dutch railways) and RWE. The number of joint promotions is limited to approximately three per year, apart from potential promotions with the partners in quality (Van der Meulen & Lokerman, 2003).

6.4.2.1. The co-branded attraction PandaVision

All of the co-branded collaborations influence the brand representative system of Efteling (Franzen & Bouwman, 1999; Keller, 2003a). The Efteling brand gains new associations through these co-operations, enhancing some associations, reshaping or weakening others. The most intensive form of collaboration (from a consumer's point of view) occurred in 2002, when Efteling developed the PandaVision attraction in collaboration with WWF. PandaVision is a themed attraction in which education and entertainment cross paths continuously. Guests take part on a journey through the Walking Forest and the Wonder Cave, culminating in a three/four-dimensional journey around Mother Nature's world. After their journey around the world has concluded, the guests enter an interactive post-show area, where guests can interact with the characters from the film through computer games. Through PandaVision, WWF has gained a powerful communication platform through which the importance of nature conservation can be communicated in a penetrating manner to approximately three million guests per year. This results in various communication effects, such as familiarity and attitude changes towards (the proposition of) WWF, but also in actual behaviour because of the subscription of thousands of new rangers (underage benefactors of WWF) and benefactors each year. Additionally, through this collaboration Efteling has

gained a high rated attraction and a growth in park capacity as well as new communication possibilities and an enforcement of the company's already present 'green' image.

6.5. Research hypothesis and –design

Efteling has developed an interesting co-branded attraction together with WWF that seems to fit the brand associations of Efteling. Applied to the brand alliance between Efteling and WWF it can be concluded that both brands are to be considered strong. According to the BrandAsset Valuator (2005), Efteling is the strongest brand in the Netherlands regarding brand power, WWF is the runner up. Both brands were described as leadership brands, having both high vitality (differentiation and relevance) and stature (esteem and knowledge). Internal research at Efteling (as reported in Van der Meulen & Lokerman, 2003) shows that 90% of the park's visitors feel that Efteling and WWF are a good fit. Approximately 50% of the visitors feel that PandaVision better suits Efteling than WWF; the other 50% feels PandaVision suits WWF better than Efteling. Apparently, visitors feel the attraction fits both Efteling and WWF equally well. In its inaugural year, the attraction was evaluated with an average rating of 8.6 on a scale from one (poorest) to ten (best).

The consumer not only judges both brands separately, but also in interaction with each other. WWF and Efteling both feel very strongly about a sustainable life. Efteling was, after all, established in 1952 as 'Stichting Natuurpark de Efteling' (Foundation National Reserve Efteling) and since its establishment, investments in the health and revitalisation of the park's flora and fauna have been an important part of the company's strategy.

6.5.1. Misfit between PandaVision and Efteling?

In spite of these arguments, research shows the fit between PandaVision and Efteling might be less strong than is assumed by most people. A principal component analysis showed PandaVision and the steam train, two obviously unrelated attractions, to be correlated high on a certain, unknown, dimension (Cornelis, 2005). According to sociologist Feddes (1998), steam trains are theme park's most dangerous attractions regarding a visitor's experience; they pull visitors out of the enchanting contra structure. And he could very well be right at this. A ride at the steam train confronts visitors with thousands of parked cars at the parking lot, trash cans behind fences, general traffic on the roads around the park and supplies at the staff member cafeteria. Not the associations the park management wants to create regarding Efteling. PandaVision, as well, could have a similar effect on visitors. The attraction's pre-show might be considered as a WWF commercial and the main show confronts visitors with the cruel and polluted outside world. In the main show, WWF's story is told by painting a picture of polluted oceans, melting icecaps and clear felling of rain forests. Both the steam train as well as PandaVision might pull visitors out of the contra structure the park generally offers. If this is the way the attraction is perceived by guests then the co-branded attraction PandaVision might dilute the Efteling brand.

6.5.2. Research hypothesis

Co-branding is a frequently used branding strategy within the theme park industry in general and in the Efteling in particular. Although warnings have been given concerning possible negative spill over effects in case of a poorly chosen collaboration, little disturbing evidence has been provided in

academic literature. This might be caused by the research methods that were used in the three studies described in section 6.2. The IBRA-method, explained in section 6.3, should be better to measure brand effects, for this is a completely unaided method for measuring brand associations, and will therefore be used in this research.

The objective of this study was to investigate whether the relationship with WWF, resulting in the co-branded attraction PandaVision, indeed could have a negative effect on the strong brand associations of Efteling; using the IBRA research method. While this was a real life situation the co-branded attraction as such could not be manipulated. Therefore information about the co-branded attraction was manipulated. When consumers are confronted with two brands which form an alliance, an opinion can be formed about this collaboration. Based on the Elaboration Likelihood Model of Petty and Cacioppo (1986) it can be stated that this opinion shaping process can occur in two ways. Shallow information processing and storing can occur when the alliance is not of interest to the consumer and / or when a lack of processing capacity and opportunity is present (peripheral route of information processing). Alternatively, the information can be processed and stored intensively if the consumer is more involved and if processing capacity and opportunity are present (central route of information processing). Central route of information processing will lead to more enduring and stable attitude changes (Petty & Cacioppo, 1986). In this study information about the co-branding that had to be processed negatively and more intensively has been provided. The assumption was that giving somewhat conflicting information about an attraction to respondents would get them more involved. Respondents had to think about this information and make up their minds. By manipulating the fit between the co-branded attraction, WWF and the Efteling we could find out the impact of the brand fit (WWF as well as PandaVision) on the brand representation of Efteling.

The hypothesis for this study was based on the discussion and suggests:

H1: *There will be a negative effect of visiting a co-branded attraction (PandaVision) on the core brand associations of one of the constituent co-brands (Efteling) if the perceived brand fit is decreased.*

If the hypothesis could be supported for a strong brand like Efteling this would certainly have implications for brands with lower brand equity and less strong co-branded rides and attractions. When effects are distinguished at strong brands, it can be expected that these effects will most definitely occur at brands with less powerful representation systems as well.

6.5.3. Experimental design

Seventy students of Tilburg University's Leisure Sciences department took part in an experiment at Efteling. One of the challenges of the research would be to find a sufficient group of homogeneous respondents willing to participate in a more than one hour during experiment. Research shows that there are large differences between visitors coming from different areas of the Netherlands (Cornelis, 2005). The students were chosen for convenient reasons, because they happened to be a quite homogeneous group of respondents, all coming from the south of Holland. A measurement of pre-imposed attitudes took place, followed by a visit to the PandaVision attraction. After the attraction visit, a post attitude measurement took place. The time-span between both measurements was approximately one hour. The primary measurement objective was to establish the spontaneous and unaided brand representations regarding Efteling. Respondents were asked to think about Efteling and then write down all of the

associations that came to mind. They were then asked to indicate which of these associations were most influential concerning their image-forming of Efteling (the so-called core associations). As many associations as possible could be underlined as core associations. Finally, the respondents indicated on a five point scale to what extent an association was either negative (one) or positive (five). After this primary measurement, the students were randomly divided into two equal groups. The control group was immediately escorted to PandaVision; the experimental group was escorted to the attraction approximately five minutes later. There was no contact between groups whatsoever. The advantage of this design is the high internal validity, meaning that the treatment actually caused the observed effects on the dependent variable, for there are no extraneous variables involved in this design. Whether the cause-and-effect relationships found in the experiment can be generalised beyond the experimental situation, for instance to other populations and settings, has to be seen (Malhotra & Birks, 2000).

6.5.3.1. Treatment

In the experimental group, the brand fit (the degree in which the respondents felt WWF, PandaVision and Efteling fit together) was manipulated. As can be read in the intro of section 6.5, the collaboration between Efteling and WWF was generally considered to be positive. By giving the respondents a negative cue, manipulation of the perceived brand fit took place. The respondents were told the results of the research mentioned in section 6.5.1, which demonstrated that PandaVision was linked to the steam train, and were then handed the possible explanation. 'Both the steam train as well as PandaVision might pull visitors out of the enchanting contra structure the park generally offers. That is not the reason you visit a theme park, is it?' The experimental group was then asked if this was flawed reasoning or whether they felt that Efteling and WWF truly were an ill fit. With this information in mind the experimental group visited and experienced PandaVision. Although the wording of the treatment was chosen to be slightly negative, respondents were not given a lecture. They had to come up with their own reasoning and argumentations whether or not to support the presented idea. So the purpose was to manipulate them in a negative way concerning the fit of PandaVision and Efteling without biasing the brand associations (of the Efteling).

To assess the effectiveness of the treatment the respondents were asked to state, on a five-point-scale, the degree to which PandaVision fits with either Efteling or WWF. A score of 3 would indicate that the respondents feel that PandaVision fits both brands equally well. Respondents were also asked to indicate on a five-point-scale how well Efteling and WWF fitted together. A score of 5 would show that the Efteling and WWF brands fit together very well; a score of 1 would indicate that the respondents feel that Efteling and WWF do not fit together at all.

6.6. Results

The experiment's results have been processed according to Timmerman's (2001) IBRA-method. The analysis has been performed three-fault, by three different researchers without prior consultation. Consensus was reached on the majority of associations, apart from one or two associations that did not precisely fit the IBRA-schedule. These associations were not taken into account. None of the associations left out of analysis was a core association.

6.6.1. Composition of control and experimental group

To assess the likelihood of differential group composition, analyses have been made regarding the most essential variables. The results of the pre-imposed attitude measurement can be found in table 26 (5.87 versus 5.94, control group versus experimental group respectively). The percentage of the group that has previously visited the PandaVision attraction (56% resp. 59%), the number of free associations (16.53 resp. 16.26), the number of core associations (4.82 resp. 4.75) and the average evaluation of core associations (4.24 resp. 4.53) can be found in this figure as well. The evaluation of Efteling has been measured on a seven-point-scale, as is standard practice within Efteling's research department, and the average evaluation of core associations has been measured on a five-point-scale, as is advised by Timmerman (2001). All differences displayed in table 26 two have a p-value of > 0.05 meaning there was no differential group composition; the control and experimental group were equal as far as the most important variables are concerned.

Table 26 *Composition of the control and experimental group*

	Overall evaluation of Efteling	Visited PandaVision before	Number of free associations	Number of core associations	Average evaluation of core associations
Control group	5.87	56%	16.53	4.82	4.24
Experimental group	5.94	59%	16.26	4.75	4.53

6.6.2. Treatment procedure

The results displayed in table 27 show that the experimental group displayed significantly lower scores on both items explained above than the control group, which did not undergo treatment. The perceived fit between PandaVision and Efteling was 3.08 for the control group versus 2.34 for the experimental group ($p = 0.023$), and the perceived fit between WWF and Efteling was 4.85 versus 4.16 respectively ($p = 0.046$). These results thus prove that the treatment was successful. Table 27 also shows that the evaluation of PandaVision was not affected by the treatment; no significant differences in attraction evaluation between both groups could be discerned (7.42 for control group versus 7.62 for experimental group, $p = 0.276$). A possible effect on the average core associations would thus indicate a direct effect on the perceived brand fit.

Table 27 *Influence of treatment*

	Control group	Experimental group	Difference in evaluation	F	Sig. (two-sided) *p-value*
Fit between PandaVision and Efteling	3.08	2.34	0.74	5.412	**0.023**
Fit between WWF and Efteling	4.85	4.16	0.69	4.144	**0.046**
Evaluation of PandaVision	7.42	7.62	0.20	1.205	0.276

6.6.3. Evaluation of the core associations

Now that the effectiveness of the treatment has been established we can determine whether hypothesis 1 could be supported, meaning whether the average evaluation of the core associations has been diminished by administering this treatment. At the post-experimental measurement, respondents were asked to complete the pre-experimental questionnaire once again. All associations regarding Efteling were to be written down, the most important associations regarding their perception of Efteling were to be underlined and all associations were to be evaluated regarding the degree in which they were perceived as either positive or negative. The results displayed in table 28 show that the treatment did in fact have affected the average evaluation of core associations. The average evaluation of the core associations did not vary pre- and post-experiment regarding the control group (4.24 versus 4.26; $p = 0.862$). The experimental group, however, does show significant negative changes in the average evaluation of the core association (4.53 versus 4.27; $p = 0.026$). These results support hypothesis one and thus demonstrate that the perceived brand fit in this co-branding study influences the Efteling brand. The interesting finding is that the brand fit manipulation has resulted in a more negative image of Efteling without affecting the evaluation of the attraction as such. So, although respondents have elaborated on the information given in a negative way, this did not influence their experience of the co-branded attraction, but it did effect their evaluation of the brand Efteling.

This effect also manifests itself at an individual level, but to a lesser extent. The correlation between the perceived fit of Efteling and WWF and the average post-experiment evaluation of core associations is 0.432 ($p < 0.000$) and the correlation between the fit and the difference between the average evaluation of core associations pre- and post-experiment is 0.478 ($p < 0.000$).

Table 28 *Appreciations of core associations Efteling*

	Average evaluation core associations pre-experiment	Average evaluation core associations post-experiment	Difference in average evaluation core association pre- and post	T-value	Sig. (two-sided) *p-value*
Control Group	4.24	4.26	0.02	0.175	0.862
Experimental Group	4.53	4.27	0.26	-2.341	**0.026**

6.7. Conclusion and discussion

This research is presented as a preliminarily study and the results should be interpreted with caution. The sample size was limited to 70 respondents and the experimental design with students may not necessarily represent the typical visitor to the Efteling. Although it was not the primarily goal of this study to make broad generalisation on the topic of co-branding in the field of theme parks (this may be a route for further research), some interesting results are worthwhile to mention.

6.7.1. Even strong brands can be harmed

Through this field experiment an insight has been given into the possible effects a respondent's perceived brand fit within a co-branding situation can have on the average evaluation of core associations of one of the constituent brands. No effects were found within the control group where no negative manipulation of the perceived brand fit was applied, which strengthens our conclusions that perceived brand fit influences a respondent's average evaluation of core associations. Industry operators should be aware of these effects when considering a co-branding strategy or long-term collaboration with another brand. Not only does this experiment show that an ill-considered choice for a co-brand partner can influence the brand associations, it can even influence the core associations of a brand. While core associations are the first associations that come to mind when one is confronted with a brand (signal), they are used to position the brand in the mind of the consumer. This study shows that the average evaluation of the core associations decreased by the negative brand fit, and thus the positioning of the brand has been changed in a negative way. The brand was harmed by the co-branding strategy. If this is true for the strongest brand of the Netherlands, chances are high that weaker brands will be affected even more. Pay attention to selecting the right brand for your co-branding strategy and manage all associations carefully.

6.7.2. Attraction effects and brand effects

Another interesting finding is that the brand fit manipulation has resulted in a more negative image of Efteling without affecting the evaluation of the 3D/4D-attraction as such. Both the control and experimental group liked the PandaVision-experience, although the experimental group was told that the PandaVision-experience would pull them out of the enchanting contra structure. Respondents have processed the information and reasoning given to them intensively, but this did not weaken their experience of the attraction. It is important to note that the average evaluation of an attraction as such does not guarantee success. PandaVision is evaluated very positively but can still have a negative effect on the brand Efteling if the brand fit is considered to be poor. In the long run it is not about adding a new attraction to your theme park, but having people love your park and brand. As brands are seen by most companies as their most valuable assets, theme parks should be aware of the relation between attraction effects on the one hand and park- and brand effects on the other. They should know the core associations and assets of their brands and handle them with care. Have a close look at the brand effects of a new attraction; do not only pay attention to the attraction effects. A good (co-branded) attraction should strengthen the brand.

Cornelis (2008) has developed an Attraction Response Matrix (ARM) which divides the various effects of attractions in four different levels (attraction effects, park effects, brand effects and economic effects) and various temporal dimensions (before, direct effect, short term effect and long term effect).

The Attraction Response Matrix is a first conceptual approach to better streamline the research into the influence of new attractions on attendance. The matrix attempts to offer an integrated framework in which research into the effects of new attractions can take place in a systematic manner. The basic assumption behind this Attraction Response Matrix is 'in situation A, attraction B, will probably lead to effect C, for target audience D.' Research will thus have to be performed into possible relevant effects of new attractions (C), the factors that are crucial in determining the situational context (A), a perceived categorisation of attractions that is relevant from a visitor's point of view (B) and, finally, the criteria based on which the target audience for the theme park industry can best be segmented (D). An attraction's effect on a brand, as detailed in this article, is only one of the four dimensions. The wider use and refinement of this Attraction Response Matrix could provide a vastly improved insight into the various effects of co-branded attractions on organisations in the theme park industry and their brands (Cornelis, forthcoming).

6.7.3. Repetition versus elaboration

Petty and Cacioppo (1986) state that high involvement processing will lead to an enduring and stable attitude change, even after one exposure. This is the route we assumed our respondents followed after being given the treatment. However, even low involvement processing, taking the peripheral route of information processing, will result in an attitude change. This one can be even more dangerous, and thus extra caution is called for, as this kind of brand damage is not instantaneously visible (Heath, 2001). Damage of one's brand generally starts with a (metaphorical) tiny patch of rust on the brand which might come to be an irreparable hole when the brand is not handled and maintained with sufficient care and attention. Especially when consumers are repeatedly confronted with the negatively evaluated co-brand this will have an enduring and lasting, hard to recover impact on the brand. Grossman (1997) showed that many classical conditioning principles apply to co-branding in advertising. Classical conditioning research suggests that pairing two brands will be more effective when the connection is repeated a number of times. An ill-considered choice for a co-brand partner can, as demonstrated, harm one's own brand, especially when repeated exposures take place. Be sure that the core associations of the co-branding partner have a close fit to your desired brand associations. For not all (other) associations of the co-branding partner can have a perfect fit to your brand, at least be sure that no negative associations are salient.

6.7.4. Limitations and future research

Because of the crude manipulation it is unclear what precisely caused the established effect. Is the effect caused by the degree of elaboration (meaning, because the respondent is triggered to think deeply about the matter at hand) or by the substantive guidance? Supplementary research with several experimental groups is needed to answer this question. The lack of a visible effect within the group where no intensive cognitive processing of the brand fit took place does not necessarily indicate that association transfers cannot occur without elaboration. Considering that our field experiment made use of an existing co-brand situation might render this effect invisible, because it is already present in the pre-experiment measurement. Should two brands consider a co-branding strategy, its effects on the average evaluation of core associations of both brands can be measured through the IBRA-method. The pre-experiment measurement will then provide a reliable brand image, without impositions by the future co-brand strategy. When a change in the average evaluation of the core associations occurs, a direct influence by the co-brand (whether or not caused by (elaboration of) the brand fit) has been established. So make sure to measure all brand associations and know both brands in detail.

Future research into the effect of brand associations on brand assets (instead of core associations) would bring us all one step closer to fathoming co-branding strategies. Additional research could also be performed into the long-term effects of perceived brand fit. Do the effects established in this article slowly fade or do they increase with time? This experiment made use of two strong brands. However, according to Wasburn et al. (2000) weaker brands could be found to have a different effect. Finally, the effects on the second constituent brand have not been included in this research; further research into these effects is desirable.

6.7.4.1. Unconscious effects

According to Timmerman (2001), the IBRA-method does not show distortion because of cueing but is limited to those associations the respondent is already aware of. Representations on a lower level of awareness that can also influence the actual behaviour towards the brand (Zaltman, 2003) are thus largely ignored by the IBRA-method. According to Zaltman (2003) at least 95% of all information processing takes place at an unconscious level. In order to, with a great degree of certainty, rule out negative effects of co-branding research should be performed into and with methods that measure subconscious brand representations as well. Zaltman's Metaphor Elicitation Technique (ZMET) would be a well suited technique, as it combines several research techniques, such as laddering, repertory grid, photo sort and collage (Franzen & Bouwman, 1999; Keller, 2003a). Other techniques that can be used to measure the sub consciousness are, amongst others eye tracking, fMRI, facial coding, EEG, MEG and implicit cognition and association test (Dijksterhuis, 2007; Reus, Van der Land & Moorman, 2008). These techniques could be used to look after the unconscious effects of co-branding. By really understanding how associations are created and maintained, practitioners may be better able to enter into mutually beneficial co-branding arrangements. Measure and manage the unconscious associations as well.

6.7.5. Final conclusions

Co-branding is a very often used strategy in the theme park industry. All theme parks have (official) partners with whom they collaborate in one way or another. Many parks even build rides and attractions together with their co-brand partners. The benefits are clear and are mentioned in many academic articles about co-branding. However, theme parks should also be aware of the dangers of co-branding. Pairing with a wrong partner can seriously damage the brand; negative spill over effects, erosion, brand dilution and even negative bottom line effects for the participating brands are possible. In this article the more narrow definition of co-branding has been used, meaning the combination of two brands to create a single, unique product. However, this does not mean that the results, within the cautions of generalisation, would not be applicable to the broader situations of co-branding. As the results showed, the evaluation of the co-branded attraction did not change, but the evaluation of the constituent brand did. This means that the brand (mis)fit caused the negative effects. This could happen to any ill-considered pairing of two or more brands. When theme parks for instance use intellectual property (IP) to add to their rides and attractions, they should be sure that this IP fits to the brand. Sponge Bob could harm the Efteling brand, as Cinderella could harm Walibi World's brand. One way of being sure whether the co-brands make a perfect match is by doing an IBRA-study. Using one of the described research techniques that look at unconscious effects would even be better. If the research design would be based on the Attraction Response Matrix this would result in a vastly improved insight into the various effects of co-branded attractions.

In the long run it is not about building strong attractions, but about having visitors love your park and brand. A new (co-branded) attraction is just a mean to this end.

Chapter 7 *The impact of (not) theming an attraction in the global theme park industry*

The year 2010 has become quite a significant year for Universal Studios. Not only did the company open a completely new theme park in Singapore (Loh, 2009), it also invested heavily in what has since been referred to as a 'theme park within a theme park' (Barnes, 2009). Approximately 265 million dollar will be invested to create a 20-acre, multi-attraction addition to Universal Orlando's Islands of Adventures theme park aptly named Wizarding World of Harry Potter. The 20-acre 'theme park within a theme park' will feature various experience ridden retail as well as food & beverage locations. Two existing attractions will be rethemed and a third, mysteriously unknown, attraction will be added (Barnes, 2009).

7.1. Introduction

Investments such as the above detailed Wizarding World of Harry Potter at Universal's Islands of Adventure theme park do not merely serve to highlight Universal's unique talent for storytelling and theming. Investments in new attractions are often named one of the most significant drivers for theme park attendance, both by industry professionals (Cornelis, 2010a; Pikkemaat & Schuckert, 2007) as well as analyst publications (NRIT, 2007; PricewaterhouseCoopers, 2007, 2008; TEA/ERA 2007, 2008, 2009; TEA/AECOM, 2010). On average, almost 10% of theme park turnover (ERA/AECOM, 2009) or up to 5-10% of the initial project investment (Wanhill, 2008b) is reinvested in the park. The reinvestment rate and the apparently escalating scale of investments in new attractions has been of concern to industry experts for decades, ever since the opening of what is generally regarded as the first contemporary theme park; Disneyland (Anton Clavé, 2007; Price, 2003; Wanhill, 2008b). Since that time, several attempts have been made to determine ideal reinvestment rates and to isolate the effects of new attractions on theme park performance, some more successful (Cornelis, 2010a, 2010b; Van Oest et al.,2010) than others (Hogley, Chen & He, 2005; Price, 2003). The results from the studies into the effect of new attractions on theme park performance by Cornelis (2010a, 2010b) and Van Oest et al. (2010) both indicate that various attractions have been found to have had a significant positive effect on performance, whereas others were found to have had no substantial effect (Cornelis, 2010a, 2010b) or to have attained a return on investment rate of less than 100% (Van Oest et al., 2010). Even though several possible explanations were given for these differences of impact, a deeper insight into the factors that influence the impact of a new attraction on theme park performance has yet to be gained. Van Oest et al. (2010) discuss the differences between effects of new attractions with the concepts of monetary investment, type of attraction, saturation effect and reinforcement effect. With regards to type of attraction, Van Oest et al. (2010) distinguish between thrill and theme attractions. It is not really clear how this distinction into two categories has been made by the authors. One might debate whether 'theme versus thrill' isn't an oversimplification of the plethora of attraction types in use in the contemporary theme park industry. Several attractions typified by Van Oest et al. as being thrill attractions, such as Piraña, Monsieur Cannibale and Vogel Rok have themed elements as well as physical stimuli in various degrees. Despite the arguments against a simple classification into two, not mutually exclusive, categories Van Oest et al. (2010) postulate that "all else being equal, investing in thrill attractions is more effective than investing in themed ones" (p.23). This is even more contra intuitive because their research is only applicable to theme park the Efteling in the Netherlands. Moreover, in the academic literature many positive advantages of theming can be found. Theming is important for creating an initial perception of quality, it helps boost attendance and repeat visits, provides effective word-of-mouth, adds

value to the park, increases secondary spending and gives a competitive advantage over those parks that do not apply theming (Bryman, 2004; Gilmore & Pine, 2002; Lavasser, 1994, Loverseed, 1994; Turner, 1995; Wong & Cheung, 1999). Visitors spend lots of money on merchandise products that are related to the brand, the characters and the symbolic value of the park (Anton Clavé, 2007; Turner, 1995). In a study by McClung (1991) it was found that the type of theme is one of the factors affecting tourists' preference for theme parks, and Milman (2009) shows that, according to visitors of theme parks, theming is one of the most important factors for the guest experience. Still, the results of Van Oest et al. (2010) are perhaps not totally surprising. Contemporary society seems to be witnessing the limits of the effectiveness of themed environments. Several notable commercial enterprises, such as Planet Hollywood, have experienced serious financial problems (Ebster & Guist, 2004; Lukas, 2007). Theming is no longer automatic in profit-oriented consumer services, but theming will continue to play a prominent role in everyday consumer lives (Lukas, 2007). If themed attractions are less successful and have lower return on investments than thrill rides, as suggested by Van Oest et al. (2010), then this would have severe impact on the investment policy of the global theme park industry. At this moment parks invest millions on theming because theme parks aim to create the atmosphere of another world and it is essentially the theme which becomes the main part of a theme park experience (Anton Clavé, 2007; Lukas, 2007, 2008; Milman, 2009; Wong & Cheung, 1999). Since theme parks are still a relatively new concept in tourist attractions, there is a paucity of literature on success and failure of theme parks and especially on the intrinsic value of the theme park – the theme itself (Swarbrooke, 2002; Wong & Cheung, 1999). Much attention has been paid by academics to the Disney themed environments. Most of them adopt a critical, elite perspective that finds only consumer manipulation behind themed facades and only corporate greed behind the proliferation of themed environments (Sorkin, 1992). To the knowledge of the author, except for the research of Van Oest et al. (2010) that has only be examined at one park and contains a debatable categorization into two categories, no research on the impact of theming on the number of visitors to theme- and amusement parks has been conducted yet. This articles aims to measure the impact of theming an attraction on the number of visitors to theme- and amusement parks by using the Attraction Response Matrix, which was proposed by Cornelis (2010a). The Attraction Response Matrix can be used to find an explanation for the growth in attendance that has been caused by the investment in new attractions. The matrix distinguishes between various levels of responses to a (new) attraction, namely attraction response, park response, brand response and economic response. By investigating the individual attraction -, park- and brand responses, insight can be found in the reasons why a certain attraction is more successful in gaining extra attendance than other (similar) attractions. One of the explanatory factors is whether the attraction is themed or not (Van Oest et al., 2010). Various levels of theming can be found in literature. Lukas (2007) makes a distinction between macro theming and micro theming, and Bryman (2004) and Gottdiener (2001) distinguish between theming and decoration. Other than the fact that there are various levels of theming we should answer the question how these levels of theming are processed and experienced by the visitor. Different people view themes in different ways (Gottdiener, 2001). As with any signifying object, the sign means different things to different people. Individuals experience themed places in a host of ways. The range of meaning that exists for any signifying object is why Gottdiener (2001) is "very skeptical about claims for a single, definitive interpretation of any particular themed milieu—an activity that is increasingly common in academic circles" (p.146). From the perspective of the Attraction Response Matrix we expect the way theming will be processed (on attraction -, park - and brand level) to influence the height and duration of the growth in number of attendances (economic response). In the next section the theming construct will be elaborated upon and various levels of theming will be discussed. Next in section 7.3. a so-called theming processing model will be presented,

which can be used to determine the processing of various levels and aspects of theming. Subsequently the results of the theming processing model will be used in an econometric model to measure the impact of processing of theming on the number of visitors to theme and amusement parks. In this structured way the impact of processing theming of attractions on the attendance levels of parks will be examined. The paper ends with a conclusion and discussion.

7.2. Theming landscape

"Theming consists of the application of a narrative to institutions or locations. Typically, the source of the theme is external to the institution or object to which it is applied. This externality is usually revealed as being external in terms of space, time, sphere or any combination of these sources" (Bryman, 2004, p.15). Theming means providing a product with content and establishing the symbolic need to consume it. A theme is, from this point of view, the seminal basis of the forms and contents of a park and the most relevant part of the visitor's experience (Anton Clavé, 2007). As already mentioned in the introduction section of this paper various levels of theming can be distinguished. According to Lukas (2007) micro theming means "the nuances of details that might be noticed by a patron in the most obscure and unexpected places" (p.79). Decoration can be distinguished from theming by the lack of application of a narrative; decoration merely serves as to improve the visual attractiveness of an object or location without the pretention of conveying a narrative (Bryman, 2004). According to Gottdiener (2001) the most spectacularly successful themed environment is Disneyland, in Anaheim, California, followed closely by the much larger Disneyworld in Orlando, Florida. While Disneyland is widely acknowledged as the original theme park thanks to its unique medley of fantasy worlds, earlier amusement parks also featured themed areas. In English landscape parks, allusions to Greek and Roman mythologies abounded. In a similar vein, Luna Park at Coney Island brimmed with Renaissance and Oriental influences. Disney simply increased the scale of theming to new levels of immersion (Jones & Wills, 2005). At Disney one can observe 'an obsessive eye for detail' (Marling, 1997) and the frequent use of storytelling (Capodagli & Jackson, 2007; Disney Institute, 2001; Imagineers 1996, 2003, 2010). Storytelling is the one thing that has made the Disney brand what it is today and it will be the fundamental basis for the future success of the company (Stewart, 2005). It is the fundamental building block of everything the company does (Imagineers, 1996). At Disney theme parks a building is not just a building. Instead, buildings take on the position of storytellers and the obvious function of a building is secondary to its primary purpose: to help tell the story. Each building's foundation not only supports a physical structure, but it also supports a story structure (Imagineers, 1996). Signifier and signified are no longer separate or distinguishable, and result in the fusion of the unreal and the real. In Disney theme parks visitors pass between different 'ages' and 'worlds'. "As distance and difference collapse, fantasy and reality collide" (Jones & Wills, 2005, p.111). Disney not only applies narratives in a very detailed way, but it also practices storytelling. Not all narratives are stories. Stories are emotionally and symbolically charged narratives. They do not present information or facts about 'events', but they enrich, enhance and infuse facts with meaning. Stories are narratives with plots and characters, generating emotion in narrator and audience through a poetic elaboration of symbolic material (Gabriel, 2000). Stories make experience meaningful, connect us with one another, and make the character come alive (Boje & Dennehy, 1993 in Gabriel, 2000). We also see that a lot of Disney attractions have a so-called secondary layer of meaning (Marling, 1997; Imagineers, 1996). Visitors who are familiar with the content of the attraction in advance will experience a deeper symbolic meaning, partly caused by the eye for theming detail, than those visitors that don't have this content knowledge. A ride in Toy Story Mania! (Disney's Hollywood Studios) will be far more emotional and memorable for a child that has seen the movies and played the games, than for the

parents that are only familiar with some characters in the story. The child will experience the details of the ride, which will be unnoticed by the parents. This lived experience is related to the ideas of Boje and Dennehy (1993), Csikszentmihalyi and Csikszentmihalyi (1992), Pine and Gilmore (1999), O'Sullivan and Spangler (1998) and Schmitt (1999, 2003). Many attractions have a lower degree of theming and no storytelling can be found at these attractions either. Some attractions even distract the visitors' attention from the theming because of inconsistent theming or conflicts between parts of the theming and the overall theme. For example, the Wild West city in Bobbejaanland Belgium gives a desperate and authentic Wild West feeling *till* you can hear the sound of 'surfing, surfing' from the Beachboys through the audio system. At that moment signifier and signified are two separate entities again and the feeling of themed escapism has disappeared. Maybe the visitor will remain with an overall pleasant feeling, but the specific immersion and intense processing of the Wild West is gone. To conclude this section, I have shown four aspects that I assume to be important in (the processing of) theming, namely degree of theming and eye for detail, storytelling, secondary layers of meaning and distraction. It is on this basis that I will investigate the impact of theming in this paper. These four various aspects of theming will be discussed in the next two sections.

7.2.1. Degree of theming

According to Bryman (2004) theming can be expressed through name, architecture, decoration, ambience, clothing of cast members, sound, and food and goods for sale. Based on these various observations were made at two theme parks in Madrid in April 2010. In both Warner Parque Madrid and Parque d'Atracciones ten attractions have been observed on the level of theming to find out whether this was a useful tool to determine the level of theming of attractions. Attractions could score either 0 or 1 on each individual component and afterwards the sum score was calculated by adding the scores on each component for each attraction. The sum scores of the twenty attractions were compared with the perceived level of theming which was measured amongst the visitors of the parks. In the test 43 visitors of the investigated attractions were asked to evaluate the level of theming of the attraction on a 10-point scale, being 0 absolute no theming and being 10 a very heavily themed attraction. The results of this perception research were compared with the observation (sum) scores and the differences were discussed during in-depth interviews afterwards. In consequence of this pre-test an adaptation of the original Bryman-list was made, which was tested on the same attractions in the same way again. The final list of ten components and definitions can be found in appendix C. On the basis of the final list of ten theming components 672 attractions from the 20 largest amusement- and theme parks in Europe 2007-2009 (TEA/ERA, 2008, 2009; TEA/AECOM 2010) have been evaluated on the level of theming. In total 22 parks were investigated because Bakken and Blackpool Pleasure Beach were not in the list of 2009, but they were in the list in previous years. The Cronbach's alfa of the final scale with 10 indicators is 0.751 and the lowest item-total-correlation is higher than the necessary .30 (Pallant, 2005). Table 29 shows the number of attractions researched per park. In this table a distinction is made between theme parks on the one hand and amusement parks on the other because many authors state this distinction to be important in many different ways (amongst others Anton Clavé, 2007; Samuelson & Yegoiants, 2001; Swarbrooke, 2002). The distinction is based upon the characterization of Anton Clavé (2007), that allows one to positively identify theme parks as ludic places consecrated to distraction, evasion, imagination, knowledge and play on the basis of a series of twelve criteria and differentiating them from other parks (like amusement parks) and recreational areas. Some of the important criteria of

Anton Clavé include whether the park has a thematic identity that determines recreational alternatives, and whether the park contains one or more themed areas. In general terms, no characteristic taken individually suffices to differentiate a theme park from an amusement park but all of them are necessary.

Table 29 *Number of attractions researched according to (kind of) park*

Name of park	Theme Park	Amusement Park	Name of park	Theme Park	Amusement Park
Disneyland	29		*Thorpe Park*		30
Europa-Park	55		*Parc Asterix*	29	
Efteling	51		*Futuroscope*	16	
Tivoli Gardens		26	*Legoland Billund*	30	
Liseberg		34	*Mirabilandia*		30
PortAventura	29		*Parque d' Atracciones*		40
Gardaland	29		*Heide Park*	40	
Walt Disney Studios	10		*Attractiepark Duinrell*		18
Alton Towers	30		*Chessington World of Adv.*		23
Phantasialand	22		*Blackpool Pleasure Beach*		37
Legoland Windsor	32		*Bakken*		32
			Total	**402**	**270**

As can be seen in table 29 the list contains 13 theme parks and 9 amusement parks, of which 402 and 270 attractions have been researched respectively. In both cases this means an average of over 30 attractions per park. It is remarkable to see that eight of the top 10 parks can be classified as a theme park whereas only five of all other parks can be classified as such. The reason for this might be that the production of a themed environment is very costly (and requires the centralized control of a great many factors) (Anton Clavé, 2007). Table 30 shows the results of the 10 separate indicators that have been used to measure the level of theming. In this table the distinction between theme parks and amusement parks can be found, as well as the difference between the top 10 parks and the other parks. Table 31 shows the results of the sum scores. The kind of theming that is used most often is using a name that refers to the theming and tuning of the signage to the theme, and the theming of the ride and transport system. Both indicators have been used in circa 85-90% of all cases. The differences between the kinds of parks are nil, but concerning the size of the parks we can see that the top 10 parks use name and signage slightly less often than other parks do. The third theming indicator concerns the entrance and external architecture. Here we do see significant differences between the kind of parks as well as the size of the parks. 52.8% of all attractions in the theme parks investigated have a themed entrance & external architecture, whereas this is only 44.6% at amusement parks. The difference between top 10 parks and the other parks is even bigger with regard to this indicator, namely 59.4% for the top 10 parks versus 40.1% for the other parks. The theming components applied lest often are live entertainment, Food & Beverage/merchandise locations, ambient conditions and staff members. Still (large) significant differences can be found on almost all of these indicators when compared with kind and size of parks.

Table 30 *Percentage applied theming component according to kind and size of park*

	Kind of park		Size of park	
Theming component	Amusement park	Theme park	Other parks	Top 10 parks
Name & Signage	85.1	87.6	83.6	89.8**
Landscaping	44.2*	38.2	40.1	41.2
Entrance & external architecture	44.6	52.8**	40.1	59.4***
Queue & internal architecture	19.2	26.8**	15.3	32.6***
Ride / transport system	84.4	85.4	85.3	84.6
Staff members	0.7	27.3***	6.6	26.8***
Live entertainment	0.0	1.8**	0.0	2.2***
Sound / music	20.3	31.6***	16.1	38.5***
Ambient conditions	12.3	16.2*	6.6	23.1***
Food & Beverage/ merchandise locations	5.8	6.6	0.9	12.0***

** = p < 0.10 (two-sided test); ** = p < 0.05 (two-sided test); *** = p < 0.01 (two-sided test)*

Table 31 shows the sum scores of the degree of theming scale. A distinction has been made between various levels of theming, namely no theming, decoration, macro theming and micro theming. I have decided to classify a sum score lower than 4 but higher than 0 as decoration because analyses show that a sum score of a few points is already easy accessible. 81.7% of all attractions use both name & signage and ride & transport system as a way to theme the attraction. If these attractions use a narrative these attractions will be themed according to the definition of Bryman (2004), although we should doubt whether attractions with such a low sum score do have sufficient possibilities and pretentions to apply the narrative. In case of a lack of pretentions of conveying a narrative Bryman (2004) talks about decoration instead of theming. The attraction Ikarus in Tivoli Gardens (with a sum score of 3) is a clear example of this. Although the attraction is based on a narrative this narrative does not come over to the public because of the bare level of theming of it. To realize a certain experience is the most relevant part of theming (Anton Clavé, 2007). For this reason the level of theming is used to make a distinction between theming and decoration, instead of having (or not) a narrative. The presence of a narrative is a necessary, but not sufficient condition for theming. If a narrative is absent this will automatically lead to a sum score of 0 because no theming indicator could have been used anyway. Table 31 shows that 9.4% of all attractions have no theming at all, a minority of all attractions (45.0%) has a level of theming that is higher than decoration, of which only 12.4% has eye for detail (micro theming). Additional analyses have shown that eye for detail only appears at attractions with a sum score of 4 and beyond. If we have a closer look at the difference between the kind and size of the park then we find significant results between amusement parks and theme parks ($F = 10.153$, $p = 0.017$) as well as between the top 10 parks and the other parks ($F = 45.931$, $p < 0.001$). 50% of all theme parks in this research have a level of theming that is higher than the level of decoration and 14.1% of all attractions in this group are themed on a micro level. For amusement parks these figures are 37.7% and 9.8% respectively. The differences between the top 10 parks and the other parks are even bigger. 55.4% of all attractions at the top 10 parks are themed at a level higher than decoration, of which no less than 20.3% is themed at micro level. For the other parks the figures are 35.2% and 4.9% respectively. At the top 10 parks the least percentage of attractions is not themed.

Table 31 *Theming category according to kind and size of park*

			Kind of park		Size of park	
Theming category	Frequency	Percentage	Amusement park	Theme park	Other parks	Top 10 parks
No theming	63	9.4%	10.5%	8.6%	11.0%	7.7%
Decoration	307	45.7%	51.8%	41.4%	53.9%	36.9%
Macro theming	219	32.6%	27.9%	35.9%	30,3%	35.1%
Micro theming	83	12.4%	9.8%	14.1%	4.9%	20.3%
Total	**672**	**100%**	**276**	**396**	**347**	**325**

7.2.2. Other theming aspects

A number of other theming aspects play an important role in the way theming will be experienced by the visitor. For all 672 attractions that were observed I also measured whether or not distraction, secondary layers of meaning and storytelling could be found. Distraction plays a negative role in the way the theming of the attraction will be experienced; secondary layers of meaning and storytelling can both have a positive effect on it. For these two aspects it can be stated 'if it doesn't hurt, it doesn't blame'. Some visitors will discover the secondary layer of meaning and will have an extra intensive experience because of that, whereas not discovering this by the other visitors will not have a negative impact on their attraction experience. A similar reasoning can be given for storytelling. Table 32 shows the results of the three other theming aspects, according to kind and size of park. In table 33 the results of the other theming aspects are divided by the levels of theming as defined in the former section.

Table 32 *Other theming aspects according to kind and size of park*

			Kind of park		Size of park	
Theming aspects	Frequency	Percentage	Amusement park	Theme park	Other parks	Top 10 parks
Distraction	199	29.6%	27.9%	30.8%	40.9%***	17.5%
Secondary layer of meaning	80	11.9%	13.4%	10.9%	4.0%	20.3%***
Storytelling	62	9.2%	10.9%	8.1%	3.5%	15.4%***

** = p < 0.10 (two-sided test); ** = p < 0.05 (two-sided test); *** = p < 0.01 (two-sided test)*

In no fewer than 29.6% of all attractions researched distraction can be observed. The percentages are not significantly different for the kind of park, but they are for the size of the park. Distraction can be found significantly less often in the top 10 parks opposed to the other parks, 17.5% versus 40.9% ($p < 0.001$) respectively. In general in 11.9% of all attractions examined a secondary layer of meaning can be found. The differences between the kind and size of parks are similar as stated above: we can only observe significantly different results for top 10 parks opposed to the other parks ($p < 0.001$), with the scores being respectively 20.3% and 4.0%. No significantly different results can be observed for theme parks opposed to amusement parks. The same can be said for the use of storytelling. In 9.2% of all attractions storytelling has been applied, at larger parks the percentage is 15.4% and at smaller parks it is only 3.5% ($p < 0.001$). In the compressed table 33 the results can be found of the division of the other theming aspects according to the levels of theming as defined above. The category 'no theming' has been left out of consideration because this factor scores, per definition, 0% on all factors.

Table 33 *Other theming aspects according to theming category*

	Theming category		
Theming aspects	Decoration	Macro theming	Micro theming
Distraction	43.6%	17.4%	6.0%
Secondary layer of meaning	6.5%	13.2%	37.3%
Storytelling	3.9%	8.2%	37.3%

Table 33 shows big differences between the other theming aspects and theming categories. The Chi-square scores are ($\chi^2(2) = 67.615$, $p < 0.001$) for distraction, ($\chi^2(2) = 54.444$, $p < 0.001$) for secondary layer of meaning and ($\chi^2(2) = 82.289$, $p < 0.001$) for storytelling. Attractions that are themed at micro level also have the highest scores on secondary layer of meaning (37.3%) and storytelling (37.3%), and the lowest scores on distraction (6.0%). Attractions that are only themed at a decoration level have the lowest scores on secondary layer of meaning (6.5%) and storytelling (3.9%), and they have the highest scores on distraction (43.6%). Macro themed attractions can be found in between on all other theming aspects with 17.4% distraction, 13.2% secondary layer of meaning and 8.2% storytelling.

To summarize we can conclude that larger parks have the best scores on all theming aspects. They have relatively the most attractions themed on micro- and macro level and contain the lowest number with no theming. Moreover, they have the lowest percentage of distraction, and the highest percentages of secondary layer of meaning and storytelling. It is also remarkable to see that top 10 parks have the highest percentage of theme parks. In the next section a so-called theming processing model will be presented, which makes it possible to have a closer look at the individual visitor's (attraction) response. After that we will find out the impact of this individual attraction response on the final economic response in section 7.4. In that section the individual attraction responses on theming will be related to the visitor attendance at each park.

7.3. Theming processing model

According to Gottdiener (2001) people process theming in different ways. In this section a theming processing model will be presented to map out the influence of the theming aspects discussed above. Because no other theming processing model has been found in the literature yet, I have decided to base the model on the MAO-model (Batra & Ray, 1986), which is a widely acknowledged and popular model in consumer behavior literature. The MAO-model is based on the assumption that three necessary conditions should be met, before consumers process information in an elaborated way, namely Motivation, Ability and Opportunity. Motivation includes the tendency and interest of consumers to process information. Ability is the degree to which consumers are competent to process the information. Opportunity refers to the circumstances of information processing. In addition, interactions exist between these three factors. For example, consumers with a limited procedural capacity are more damaged by poor information supply than consumers with a high procedural capacity. The MAO-model is a general information processing model, which can be also applied to other situations, like the processing of themed attractions. An important aspect in the motivation to process the theming of an attraction is the personal relevance, which means the match of theming in this model. If the theming doesn't match visitor preferences they will be less likely to process the theming. Milman (2001) asked theme park managers to express their opinions regarding the likely popularity of several themes. The results of his research indeed reveal that certain kinds of theming are expected to become more

successful in the (near) future than others. The results found on an aggregated level will also be found on an individual level. Not all themes are liked equally by everyone. In addition to this motivational aspect of the match of theming we should think about the need for otherworldliness, and commitment. Ability refers to personality factors like intelligence and procedural ability as well as domain specific expertise and prior knowledge. A visitor who is not aware of the clichés used in a certain attraction, will process this attraction less intensively and detailed than a visitor who does have this prior knowledge. The amount of available time to experience the theming (time pressure) and the level of distraction are both aspects that determine the opportunity of the visitor. It is easier to process theming aspects during the (un)loading of a roller coaster than during the first drop or in a looping. The starting point of processing is the final stimulus that the visitor is exposed to, the so-called theming category. Table 34 shows the classification of theming categories which is based upon all possible constellations of earlier mentioned theming aspects. Distraction is not part of this classification system whereas it is a component of opportunity and thus is not a part of the stimulus offered for exposure as such. The last row of table 34 shows the frequency distribution of the various theming categories. The combination of decoration and storytelling was not found in the attractions examined. The classification therefore consists of 11 theming categories. Each and every one of the 672 examined attractions can be classified in one of the 11 theming categories. For examples please see appendix D.

Table 34 *Constellations of theming aspects (theming categories)*

Degree of theming	Micro				Macro				Decoration		No
Layer of meaning	Yes		No		Yes		No		Yes	No	No
Storytelling	Yes	No	Yes	No	Yes	No	Yes	No	No	No	No
Theming category	1	2	3	4	5	6	7	8	9	10	11
%	3.5	1.5	1.4	6.0	3.0	2.3	1.3	26.0	1.5	44.2	9.4

The two largest groups are the theming categories 10 and 8, which together hold for more than 70% of all attractions. They have in common that they both do not have storytelling and a secondary layer of meaning. Category 10 applies to few theming indicators (less than four) to convey the narrative in a sufficient way. Category 8 applies at least four theming indicators.

7.3.1. Effects of theming

The question that should be answered now is whether exposure to an attraction in for instance theming category 1 leads to different effects in the Attraction Response Matrix than an attraction in for instance theming category 8. The cost of theming an attraction is much higher for attractions in categories 1 to 4 than for those in the categories 5 to 8, which are in turn higher than those in categories 9 and 10. The cheapest theming category is 11 because in this category no theming aspect is used at all. Many authors (Anton Clavé, 2007; Bryman 2004; Gottdiener, 2001; Wong & Cheung, 1999) state that theming leads to positive psychological and/or economic effects. However, the relationship between individual psychological and behavioral effects on the one hand and aggregated economic effects on the other hand have not been investigated before. Nor has a nuance in theming categories been used in this regard. The theming processing model assumes that dependent on the stimulus offered (theming category) and the conditions of processing (motivation, ability and opportunity) a certain level of processing (immediate responses to the attraction) will appear. In the end this will lead to lasting responses to the attraction, park and/or brand. In the next subsection the specific individual effects of theming will be discussed.

7.3.1.1. ZMET-research on theming

In June 2009 so-called ZMET-interviews were held with Dutch visitors to a German theme park (MoviePark Germany) to map out the possible effects of theming on the experience of the visitor. ZMET stands for Zaltman Metaphor Elicitation Technique and is a hybrid methodology grounded in various disciplines, including verbal and nonverbal communication, visual sociology, visual anthropology, literary criticism, semiotics, metal imagery, cognitive neuro-science, and phototherapy, which lends support to the technique's validity and reliability (Zaltman, 1997). The method involves semi-structured, in-depth, personal interviews centered around visual images that the informant brings to the interview. ZMET is known as a powerful method to measure respondents' deeper seated associations and meanings in an unbiased way. Please refer to Cornelis (2010a) for an extensive explanation and specific application of this ZMET-method in the theme park industry. In total 15 two hour interviews were held with carefully selected and previously briefed respondents. Respondents were asked to search for metaphors to express their associations and feelings regarding the theming of the park. This assignment was given to them one week before the interview took place, so the respondents could prepare themselves for the interview in line with the ZMET-protocol. The interviews were on the one hand meant to map out park related associations and were on the other hand meant to deliver generic global groups of theming effects. The analyses were done according to the ZMET-protocol and have led to four global groups of immediate responses to the attraction, namely: attractive and interesting novel experience, enchantment, immersion and enchantment and immersion, enchantment and transformation of identity & lifestyle. Attractive and interesting novel experience means the theming leads to a processing of the attraction that is slightly different from a simple and bold ride. Theming makes the ride more attractive and brings a new experience to the visitor. Enchantment means the theming brings you in a different, more beautiful world, without being directly immersed and experiencing this other world in all different facets. With immersion and enchantment this will happen. (For a moment) visitors experience to be totally immersed in the themed environment. In the case of immersion, enchantment and transformation of identity and lifestyle visitors are touched and moved by (the theming of) the attraction in a way that it changes their lives. (For a moment) they are immersed in a different, beautiful world and they relate this to their own lives. While the distinction between the 11 various theming categories were not made at the time of the research we were not able to relate the effects above-mentioned to the classification of the specific 11 categories. However, a secondary analysis of the transcripts gives reason to support the results to be found in table 35. The name 'ride experience' for theming category 11 was added later by the author himself.

Table 35 *Individual effects according to theming category*

Theming category	Degree of theming	Secondary layer of meaning	Storytelling	Theming effects
1	Micro	Yes	Yes	Immersion, enchantment and transformation of identity and lifestyle
2	Micro	Yes	No	Immersion, enchantment and transformation of identity and lifestyle
3	Micro	No	Yes	Immersion and enchantment
4	Micro	No	No	Immersion and enchantment
5	Macro	Yes	Yes	Immersion and enchantment
6	Macro	Yes	No	Immersion and enchantment
7	Macro	No	Yes	Enchantment
8	Macro	No	No	Enchantment
9	Deco	Yes	No	Attractive and interesting novel experience
10	Deco	No	No	Attractive and interesting novel experience
11	No	No	No	Ride experience

It is notable that the classification into degree of theming cannot be related directly to a certain kind of effects. Theming categories 3, 4, 7 and 8 are out of tune in regard to this classification. This means that the presence of a secondary layer of meaning plays an important role in the kind of effects that are being produced. The effects that can be found in the last column of table 35 are based upon the ideal situation of processing, which means that motivation, ability and opportunity are all assumed to be optimally present. If one of these conditions is absent for a visitor then the attraction in the concerning theming category will fall back to a lower level of processing. Let's assume a visitor is totally uninterested in the Wild West theme, then this visitor will not experience immersion in the concerning attraction, in spite of eventual micro theming, but will for instance only be enchanted. Visitors cannot climb to a higher level of processing, for the theming category is the basis of the theming processing model. An attraction themed at macro level without a secondary layer of meaning (think about Huracan Condor in PortAventura, Spain) will in spite of the presence of motivation, opportunity and ability not lead to an immersive experience. The visitor will experience this attraction as a WOW-moment and will be in ecstasy because of the beautiful scenery during the exciting free fall, but s/he will not feel truly and totally immersed in a Mexican World.

7.4. Effects of theming on visitor attendance

To assess the impact of theming on theme park attendance the error correction model proposed by Cornelis (2010b) has been applied. Cornelis (2010b) successfully used this model to find the impact of new attractions on the number of visitors to European theme parks. The error correction model is a dynamic econometric model which makes the distinction between short-term and long-term effects on the one hand and between multipliers and elasticities on the other hand. For the analyses four parks in Northern Europe delivered data about the number of visitors, price strategy, opening days and –hours, marketing budget, investments in retail and restaurants, Halloween and winter programs, and the moments of introduction of new attractions (and shows). Additional research has been conducted to find vacation periods, national holidays, temperature, precipitation, price inflation and a diversity of trend factors. For three parks the analyses were done on a daily basis, for the fourth park this had to be done

on a weekly basis because this small amusement park was not able to retrieve accurate attendance data over the previous fifteen years. The distribution over the parks was as follows: large theme park, large amusement park, small theme park, and small amusement park. The larger parks can both be found in the European top 10 of amusement- and theme parks for 2009, which means that they both have at least 2.5 million visitors a year. The two smaller parks have an annual attendance level of maximum 1 million. The models were produced by first inserting the most important variables one at a time (starting with the addition of a new attraction because this is the main focus of the research), then judging the outcome of the model at face value and finally judging the outcome of the model in a statistical manner. In doing so, the significance (F-value), R-square, multi-collinearity (VIF-value), auto-correlation (Durbin Watson) and the robustness of the model were monitored and kept within proper boundaries (Field, 2005; Malhotra & Birks, 2000). Subsequently the predictive validity of the models, meaning how good the models predict the number of visitors to the theme park, was tested by estimating total attendance for 2008 based on the data set of the previous years. In appendix E the individual results of all four parks can be found. As can be noticed in this appendix both marketing budget and investments in retail and merchandise are excluded from the final models reported. The reason for this is that both variables suffered multi-collinearity with the variables price and investments in new attractions; two likewise important variables I preferred to keep in the model. If we have a closer look at the individual results in appendix E we notice that the mean effect of adding a new attraction to a park for all four parks is 10% extra visitors in the first year after introduction. However, relatively large differences between the parks appear because the two amusement parks have a result of 11.6% and 12.0% extra visitors in the first year, whereas the two theme parks only score 7.2% and 10.2% respectively. Investments in new attractions in the large theme park appear to be less successful than investments in a new attraction in the smaller theme park and the large amusement park. Whether this is a result of the fact that this concerns a large theme park or that this is caused by other situational factors cannot be determined. Cornelis (2010b) remarks that parks have more differences than similarities with one another and that for this reason situational factors have a large impact on the results. After calculating the mean effects per park, I examined the presence of effects in the years after the introduction year. This was done by means of a step dummy that could cover longer time periods. In all four cases a slightly significant second year effect was found, which appeared to be approximately 50% of the effect in the first year. After the second year no further effects could be measured. Next I measured the impact per attraction by running two different models, one with the investment dummy variable being value 1 and one with the investment dummy variable being value 0. In the latter case the model assumed there was no new attraction in the period concerned. By comparing the two different models with each other insights were gained about the impact of each of the 36 new attractions in the four participating parks. Finally, an overall analysis was made to measure the impact of the various kinds of theming from a consumer perspective. The results per attraction found a moment ago were first grouped into theming categories (micro theming, macro theming, decoration and no theming) and then analyzed per effect level (ride experience; attractive and interesting novel experience; enchantment; immersion and enchantment; immersion, enchantment and transformation of identity and lifestyle). The results of this analyses can be found in the subsections 7.4.1 and 7.4.2..

7.4.1. Effects per theming category

Table 36 shows the results of the analyses per theming category per year, kind and size of park. The results are not significant for the size of park, but are significant for all other categories at a 10% level or less. The first remarkable result is the high score of micro theming. This is the only category with an above average effect. All other categories of theming have a below average score in growth of number

of visitors in the first year, and, except for macro theming, all other theming categories also have a below average scores in the second year. The results are extra remarkable because micro theming has only been applied at the, in general, lower scoring theme parks. With a gain of 15% extra visitors in the first year and another good 10% in the second year this is the number one theming category concerning growth in visitors. 60% of the total effect of micro theming is realized in the first year after introduction, the remaining 40% in year 2. At the smaller (theme) park the effect of micro theming is no fewer than 18.5% in the first year. The next remarkable outcome is the big difference between the applied theming categories for theme parks. Macro theming scores below average with a mean of 7.4% in the first year, decoration scores far lower. For this latter category no effects were even found in the second year (not in the table). Theme parks seem to be better off to theme their new attractions as much and detailed as possible. For amusement parks the situation is not the same. The differences between the theming categories are less extreme for this kind of parks. Macro theming is the number one theming category concerning growth in visitors for amusement parks. Whether this is caused by the lack of micro theming cannot be stated; no micro theming has been applied in the amusement parks participating in this research. Macro theming generates the highest effects for amusement parks with 14.5% in the first year. Opposed to the significantly lower effects of decoration at theme parks compared with all other categories of theming, the effects of decoration at amusement parks are much better. Decoration scores above average for amusement parks, in the first year as well as in the second year. The category no theming has the lowest scores. The mean of this category (7.5% in the first year) is still reasonable compared with the overall mean effect of all new attractions in the large theme park (7.2%). So although the differences between the theming categories are smaller for amusement parks compared with theme parks, in both categories an increase in the level of theming means an increase in the number of visitors. Amusement parks seem to be better off as well to theme their new attractions (as much as possible).

Table 36 *Growth in number of attendance according to theming category, year, kind and size of park*

				Kind of park[3]		Size of park[6]	
Theming category	# attr.	Mean[1] Year 1	Mean[2] Year 2	AP[4] Year 1	TP[5] Year 1	Small[7] Year 1	Large[8] Year 1
Micro theming	5	15.0%	10.2%	–	15.0%	18.5%	12.7%
Macro theming	13	9.6%	5.9%	14.5%	7.4%	10.2%	9.3%
Decoratie	14	9.2%	3.5%	12.6%	4.7%	9.4%	9.0%
No theming	4	7.5%	3.1%	7.5%	–	9.0%	7.0%
	36	**10.0%**	**5.3%**	**11.8%**	**8.5%**	**10.9%**	**9.3%**

[1] F = 2.397, p = 0.086; [2] F = 43.814, p = 0.000; [3] F = 4.266, p = 0.047; [4] F = 3.124, p = 0.078; [5] F = 19.694, p =0.000; [6] F = 0.819, p = 0.372; [7] F = 1.711, p = 0.222; [8] F = 0.765, p = 0.529

7.4.2. Effects per effect level

Finally, I made an analysis of the impact of theming from a consumer perspective, so related to the individual, immediate response to the attraction that is caused by theming. This analysis has been made from the ideal situation of the visitor, which assumes that s/he has the motivation, ability and opportunity. The results of this analysis can be found in table 37. We should be cautious in interpreting the differences found. Most results are not significant and the influence of some individual cases on the mean scores per group is rather high because of the relatively low number of attractions that were examined. As will be noticed while observing table 37 the results of attractive and interesting novel experience, and those of ride experience are exactly similar to the ones of decoration and no theming

in table 36, for the concerning attractions are the same. The differences can therefore be found in the processing of the theming categories 1 till 8, which are related to the overall categories micro theming, macro theming and decoration. It is remarkable to see that the highest scores in growth of numbers of visitors in the first and second year can be found for attractions that lead to immersion, enchantment and transformation of identity and lifestyle, namely 14.0% and 10.1%. However, the results are only significant for the second year, so we have to be cautious in drawing conclusions. In other words, attractions that are themed at a micro level and have a secondary layer of meaning seem to have the highest impact on the number of visitors; provided that the visitor has the motivation, ability and opportunity to experience the theming in an optimal way. It is however remarkable that the mean effect of these three attractions is lower than the mean effect of all attractions themed at a micro level in table 36, which indicates that at least one of the micro themed attractions has realized a higher score than the 14.0% found in table 37. It also could be caused by the lack of motivation, ability and/or opportunity at one of the attractions in the concerning category, for example because of the presence of distraction. In case of distraction the attraction should actually be classified in a different level of processing effects. If this is the lowest scoring attraction then the mean of the original category will increase. However, the latter reasoning does not apply to distraction. Throughout the analyses distraction did not have the expected impact. I will get back on this in the discussion section. The runner up effect level concerning growth in number of visitors is immersion and enchantment (11.5% and 7.3%), followed by enchantment (9.9% and 6.0%), attractive and interesting novel experience (9.2% and 3.5%) and ride experience (7.5% and 3.1%) respectively. A (not significant) growth in number of visitors is visible, dependent on the level of processing. This effect can be found in the first and second year after introduction. The effects of theme parks are even a bit more extreme than those of amusement parks. Attractions in the highest scoring level of processing have result rates that are almost three times as high in the first year than those attractions in the lowest scoring level of processing, 14.0% versus 4.7% respectively. For amusement parks the differences are smaller and not significant, but for this kind of park it can also be cautiously stated that attractions that only lead to a ride experience have the lowest effects. For smaller parks we can conclude that attractions that lead to immersion (with or without transformation) are the only ones with an above average score, all other attractions have a below average score. The results for the larger parks are a bit diffuse, caused by the influence of some individual attractions.

Table 37 *Growth in number of visitors according to effect level, year, kind and size of park*

				Kind of park		Size of park	
Theming category	# attr.	Mean[1] Year 1	Mean[2] Year 2	AP[3] Year 1	TP[4] Year 1	Small[5] Year 1	Large[6] Year 1
Immersion, enchantment and transformation of identity and lifestyle	3	14.0%	10.1%	–	14.0%	14.0%	14.0%
Immersion and enchantment	6	11.5%	7.3%	13.0%	11.2%	15.0%	8.0%
Enchantment	9	9.9%	6.0%	15.0%	7.3%	9.7%	10.0%
Attractive, interesting novel experience	14	9.2%	3.5%	12.6%	4.7%	9.4%	5.0%
Ride experience	4	7.5%	3.1%	7.5%	–	9.0%	7.0%
	36	**10.0%**	**5.3%**	**11.8%**	**8.5%**	**10.9%**	**9.3%**

[1] F = 0.946, p = 0.450; [2] F = 11.619, p = 0.000; [3] F = 2.002, p = 0.167;
[4] F = 5.432, p = 0.009; [5] F = 0.602, p = 0.670; [6] F = 0.772, p = 0.559;

7.5. Conclusion and discussion

The goal of the research presented in this article is to determine the impact of theming an attraction, from a consumer perspective. For this reason the historical data of four (Northern) European amusement- and theme parks were investigated by use of the error correction model. A total of 36 new attractions at these four parks have been investigated to find out the impact of theming on the number of visitors. The choice of the participating parks is based on the distinction between amusement parks and theme parks on the one hand and large versus small parks on the other hand. From each group one park participated in this research, which means one large amusement park, one large theme park, one small amusement park and one small theme park. First the effects per attraction were measured and afterwards the results were recoded into categories of (effects of) theming. To determine these categories a large scale observation took place in which 672 attractions of the top20 amusement- and theme parks in Europe 2007/2009 were investigated. These attractions were observed on the presence of certain theming aspects. Based on the analyses of these 672 attractions a classification into theming categories has been made. First I had a look at the level of theming and the eye for detail. Based on 10 indicators it was determined whether the attraction was micro themed, macro themed, decorated or had no theme. Next the presence of a secondary layer of meaning, storytelling and distraction were observed for all 672 attractions. Based on all these theming aspects a classification into 11 different, mutual exclusive categories of theming was made. Finally it was determined to what kind of processing effects these theming categories led. For this final examination a secondary analyses of ZMET-research took place. In the end this has led to five various levels of processing, which have been used to divide the 36 attractions of the four participating parks. In decreasing order of intensity of processing these are (a) immersion, enchantment and transformation of identity and lifestyle, (b) immersion and enchantment, (c) enchantment (d) attractive and interesting novel experience and (e) ride experience.

The overall mean effect on number of attendance of all 36 new attractions of the four participating parks is 10.0% growth in the first year and another 5.3% in the second year. After the second year no significant effects were found anymore. However, (big) differences are noticeable between the parks as well as between the attractions. Theme parks have in general lower scores (8.5%) than amusement parks (11.8%) and the large theme park (7.2%) is doing worse than the smaller theme park (10.2%). The reason for this is not known, but Cornelis (2010b) believes this has mainly to do with contextual factors. If we have a look at the effects of the five levels of (processing) effects then we see big differences (too). Level (a) has the highest score with 14.0% in year 1 (and another 10.1% in year 2). Attractions that lead to immersion, enchantment and transformation of identity and lifestyle have therefore the highest effect on the attendance level. Smaller effects are seen for the attractions that lead to immersion and enchantment, but do not lead to transformation of identity and lifestyle. These attractions have a mean of 11.5% extra visitors in the first year (and another 7.3% in the second year). This means that attractions at level (a) have a 30% higher score on number of visitors than attractions at level (b). Both levels are the only ones that score above the average of 10.0%. Parks are therefore advised to strive for the highest levels of processing of theming, by using at least micro theming and preferably add a secondary layer of meaning. Differences have been found though between theme parks and amusement parks on the one hand and large and small parks on the other hand. The positive effects are most extremely visible at theme parks and smaller parks. We could not observe micro theming at the participating amusement parks, and thus processing level (a) could not be found either. It is for this reason difficult to state whether these parks should theme with eye for detail.

Some limitations should be noted regarding the results of this study. First of all it should be said that in this research, probably wrongly, it is assumed that the visitor does have the motivation, ability and opportunity to experience the theming of the attractions in an optimal way. If one of these conditions is not met the processing will not take place at level (a) or (b), but at a less intensive level of processing. In this research it is assumed that the concerning attractions were processed in an optimal way and thus would lead to a certain level of processing effect. According to the Attraction Response Matrix (Cornelis 2010a) it should be said that 'in situation A attraction B would probably lead to effect C for target audience D'. To determine the real behavioral effects of the various levels of processing this level of processing should therefore be measured by the target audience itself. This could lead to different results. With a relatively limited number of observed attractions (n=36) the impact on the number of visitors could easily be different. Although the number of observations was limited we did find significant effects in most, but not all, of the cases. Another side note is the not expected low impact of distraction. The absence of opportunity caused by distraction did not lead to different results in our research. However, distraction can be present on various levels, from a very weak one (like the presence of a TV-monitor in an old Medieval monastery, or the narrow casting of pleasant park images in the cues of a ghost house) to a very strong one (like the given example of the Californian windsurfing music in a Wild West attraction). The parks under investigation only used weak forms of distraction. No empirical evidence can therefore be given for the negative impact of (very) strong levels of distraction. Besides, the classification into five levels of processing is not based on primary data collection but on secondary analyses of data. It is possible that research with a primary focus to determine the level of processing of the 11 various categories of theming would lead to different results (levels of processing). Additional research is suggested for this reason.

Given these limitations it would be wise to interpret the results about the processing level of theming from a consumer perspective as indicative. The research gives first insights into the importance of theming attractions, but more research is needed in this area to develop better and more valid guidelines about theming. As intermediate research stage into the effect of theming from a consumer perspective a classification into four various levels of theming was made, namely micro theming, macro theming, decoration and no theming. This classification was developed on a more objective fundament of indicators and could therefore be used to give less indicative statements. This latter classification also reveals interesting results and differences. Attractions that are themed at a micro level have, by far, the highest scores on the impact of number of visitors. With a growth in visitor numbers of 15.0% in the first year and another 10.2% in the second year these attractions score no fewer than 65% better than attractions that are themed at a macro level. These latter attractions score 9.6% and 5.9% respectively, which is more or less around the average. Decoration scores below average, no theming scores far below average. For these results it should be noted again that big differences appear between amusement parks and theme parks on the one hand and large and small parks on the other hand. The effects of theming are the highest for theme parks but for amusement parks it is also evident that an increase in theming leads to an increase in number of visitors. The same can be cautiously said for smaller parks versus larger parks. The effects are the most extreme for smaller parks, but for larger parks the results of theming are also evident. Theming an attraction hence leads to a big growth in number of visitors; at least for the parks and attractions under investigation in this paper. Whether the related extra income outweighs the extra cost of theming is yet to be seen. Additional research is needed to demarcate the point where the additional costs exceed the additional income. Do the results that were found indicate the law of diminishing returns or are other processes going on? Moreover, it would be interesting to determine which theming aspects have the largest impact on number of visitors,

and which indicators of the degree of theming matter most. It also would be interesting to find out the importance of micro theming for amusement parks. It seems less obvious, given the nature of these parks, that these parks will continue to grow to micro levels of theming, but the research results give at least food for thought in this respect. Research into the causality of levels of theming and the size of parks also should be promoted. The results in this paper show that the top 10 parks in Europe have the highest score on all theming aspects. Are these parks large because they are themed or are they themed because they are large, and therefore have the financial possibilities to do so. Finally, this research was started to find out the impact of levels of processing of theming on the number of visitors. It appears as if the intensity of processing increases the effect on a behavioral level also increases.

The research into the effects of theming within the theme park industry is still in its' infancy, which is remarkable given the fact that theme parks aim to create the atmosphere of another world (Tuan, 1998) and it is essentially the theme which is the main part of the theme park experience (Anton Clavé, 2007). In consideration of the increasing competition of (themed) choice alternatives from outside the theme park industry (Bryman, 2004) the results of this paper and suggested future research are extra interesting. Parks are advised to further increase their uniqueness and competitive advantage in order to (still) be seen as places through which to temporarily 'escape' from the conditions and worries of our everyday lives. Theming plays a crucial role in this. Parks that know how to unravel the secrets and mysteries of theming the best will be the parks most successfully prepared for the future. The theming processing model might be useful to assist them in this, but the model needs further development to be applied in practice.

Chapter 8 Synthesis and conclusion

"Guessing is dysfunctional. Ignoring prior experience is denial. Using valid numbers to project performance is rational." – Harrison "Buzz" Price

At the end of this dissertation it is time to draw up a balance sheet of all the studies, publications, presentations, discussions, conversations, thoughts, convictions and doubts of the past few years. I will do this first of all from my own perspective as a PhD candidate, in order to subsequently respond to the research from the perspective of the industry. I will close this chapter with a few recommendations.

8.1. The PhD candidate's vision

As a PhD candidate I believe that the research in this dissertation has academic value in many points as well as a certain social relevance. I will elaborate on this aspect in its relation to the main points.

The importance of investing in new attractions

Parks in Europe indicate that investing in new attractions is far and away the most important manageable factor in relation to visitor numbers, both in the short and in the long term (Chapter 3). According to EAR/AECOM (2009), the capital expenditure (capex) of European parks averages approximately 9% of annual turnover, which comes to a European total of approximately €370 million. In the past three years, a total of 501 new attractions were opened in the European attraction parks (Chapter 2). Because the capex is not completely spent on attractions, the average amount invested in new attractions is unclear, but it is reasonable to conclude that the amount must in any case run into the millions. The modal frequency of investment is making a major investment once every three years, and a minor investment every year (Chapter 3). Almost 40% of all European parks invest according to this pattern. Thirty per cent invest less frequently, and the remaining 30% invest more frequently. By and large this comes to a major investment every three years of around 20% of turnover, supplemented by a minor investment of a little less than 5% in the two years in between. Behind all these averages, however, are wide variations. For instance, there are parks that hardly spend any of their turnover on a major investment, while others devote about 75% of their turnover to this end. These variations depend, among other things, on the development and maintenance phase of an individual park, its competitive position, the strategic course the park has chosen, the economy, and countless other factors, such as the management's views on the value of investment. Whereas the former chairman of the board at the Efteling, Ronald van der Zijl, indicated on stepping down in 2008 that the Efteling would, in future, invest in large new attractions only once every seven years, his successor Bart de Boer has chosen to launch a catch-up effort characterised at present by major investments on an annual basis. Since De Boer came on board the park has announced invest plans over €100 million. The financial interests associated with new attractions varies, then, not just by country and by park, but also according to the leader sitting in the driver's seat. Industry-wide, however, it can be said that the amount and frequency of investments is one of the most important points of attention for park management. The average effect of not investing is estimated by European park managers at an average decrease in visitor numbers of about 5%, and the average effect of good investment is an increase of 7.5% in the first year and another 3.5-4% in the second year.

Predicting the unpredictable...

In addition to the above findings, my research confirmed the thoughts expressed previously by Hesmondhalgh (2007), among others, that it is impossible to predict the success of investments in the cultural industries. Although Hesmondhalgh did not describe the theme park industry as an explicit example of the cultural industries, it is clear from the analyses that predicting the effect of new investments in this industry is impossible. In an industry where novelty and creativity play a large role in the expectations and satisfaction of visitors, it is not possible to guarantee success. If this were possible, the results of investment in the past would show a much more limited spread. However, the results that were found show greater differences than similarities among the participating parks and attractions. The lowest-scoring attraction showed an effect of 2% increase in visitor numbers in the first year, while at the same park another attraction showed approximately a 23% increase in the first year, followed by a further 12% in year two. Both attractions were regarded by the management team as major investments, but the results differ by about a factor of 15. The results from the other studies also show wide variation in results. For instance, a study from the management perspective showed that some parks had an increase in visitor numbers of approximately 20% the first year, followed by substantial growth in the second year, whereas other park said that they had realised zero growth in visitor numbers with their latest major investment. The research into theming also revealed great differences, both between parks and within parks. I will return to this principle of the impossibility of predicting success in the theme park industry in Section 8.3.

A roundabout way to increase predictability...

Although it is impossible to predict the effect of new attractions, the study did establish an approach to the question of investing. This was applied to the attraction park market, but the same research method can be applied to water parks, museums, zoos, city centres, cultural centres, etc. After all, these parties all have to deal with the same – or at least similar – investment issues. The error correction model is a relatively simple model to establish the short-term and long-term effects of past investments. These effects can be calculated as an average for the whole park or by separate investments, giving a good insight into the effectiveness of individual investments. By studying the separate results more closely using the Attraction Response Matrix, insight can be gained into the underlying explanation of the results. The question, then, is what research methods are the most suited to this task. Mahajan & Wind (1992) drew up an overview of research methods coupled to the new product development stages and observed that most methods fail to obtain the desired insight. They argue instead for different and better marketing research methods such as real-time marketing research. Several times in this dissertation I used a novel and well-suited research method to obtain deeper insights; this method is known as the ZMET method (Zaltman, 2003). The impression may have been conveyed that this method is the answer to all research challenges. And although I am very enthusiastic about the enormous possibilities of this method of bringing deeper, unconscious knowledge to light, and I am indeed inclined to use this method for every question needing clarification, I must observe that this method is in many cases too time-consuming. A carefully-conducted ZMET study takes at least three to four months. The method, moreover, is patented and subject to the availability of trained researchers. Therefore, a varied and carefully harmonised research portfolio is what is needed to provide insight into the mutual relationships between and within the cells of the Attraction Response Matrix. It is only in this way that we will be able to fully understand the great differences between successful and less-successful investments.

Limited scope for generalisation

If we go to work as described above, establishing and studying the situational variables minutely, we may even be able, in a limited way, to generalise about comparable situations. Because truly novel attractions are no basis for generalisation, this means that such reasoning cannot be applied in a 'copy and paste' manner to this type of attractions, but only for 'similar attractions in similar situations'. This approach may thus be interesting for organisations with multiple parks in their portfolios, such as Merlin Entertainments Group, Compagnie des Alpes, Parques Reunidos and the Aspro Ocio Group. On the one hand, these chains have simpler access to cases where knowledge can be generalised, and on the other hand, the advantages of the generalised knowledge can be applied to multiple parks.

Models and limitations

The choice of applying the error correction model as such does not make this dissertation unique and relevant. After all, it is an existing model and only one of many that could conceivably be used to observe the effects of new attractions. The only unique aspect is that this is the first time the model has been used in the context of attraction parks. The credit for this is due to Harald van Heerde, who advised me several years ago on the relative simplicity of the model with regard to the possibility of distinguishing between short-term and long-term effects. The latter was one of the requirements I had set for a model because of the perceived short-term influences of many variables—weather, weekends, etc.—in comparison to the perceived long-term effects of the most important variable in the study, the influence of new attractions.

I have followed with great interest the work of Van Heerde and his colleagues Van Oest and DeKimpe (2010), in which another model is used to approach the question of investments in attraction parks. I confess to a certain degree of envy at their model's refinement and the striking fade patterns their model displays. But at the same time, I simply do not believe in the assumptions behind their model, which are described in Chapter 4 of this dissertation. Nevertheless, it is remarkable to note that their calculations for the Efteling come to an average affect of 17% of which 35% in the first year and 22% in the second year, and that my calculations for this park came to 6% in the first year and a further 3.5% in the second[5]. In other words, the two econometric models for the first two years ended up with virtually the same effects. My model allows the situation to arrive at a new equilibrium, which in principle remains at the higher level achieved until something in the model changes. This last factor will arise by definition: next year the price will change, or the opening times or the weather, etc. In fact, the model comes with an artificial solution and would be more beautiful if, as with Van Oest et al. (2010), there were fade patterns. The question remains, however, whether their model sees effects that do not really exist; or does my model fall short in nuance and overlook certain effects that do exist? At the present time I do not believe we know the answer to this question, and it is rather difficult to determine based on the data from the other parks. Rutger van Oest was so kind as to introduce me in his model and even provided me with his syntax. Unfortunately, I was not able to apply it to the other parks, because the data sets were not suitable for the purpose. Experimentation with the Efteling data set in order to bypass doubts about the assumptions behind the models was also unsuccessful in providing the effect I had hoped for. The model became very unstable when the assumptions and variables deviated too far from the original data set used by Van Oest et al.

[5] *The weekly attendance numbers of the Efteling 1981-2005 can be found at http://wms-soros.mngt.waikato.ac.nz/NR/rdonlyres/ez6pn76yqnf4ihdhhg2fjsz4r3un7rro5hmelhydgi3ggnmgr3uu66bypfovu37f2m4uxrh7muw5we/MicrosoftWordThemeParkpaperfinalmanuscript.pdf*

A continuing quest for improvement

To succeed in my ambition to provide a tool for the theme park industry to chart the effects of investments, I was obliged to conclude in any case that the Van Oest et al. model did not appear to be the most suitable. Despite the refinement of this model and the limitations of the error correction model, the latter nevertheless does a better job of fulfilling the most important criteria for models: simplicity, robustness, flexibility and adaptability (Paap & Franssen, 2000). Moreover, in my view the error correction model is preferable because it is more conservative in its outcomes. Perhaps effects will arise after the second year that my model does not detect, but we do not know that for certain. Therefore, it is worthwhile to continue further research into the most suitable model to determine the effects of new investments in attraction parks. I remain convinced that we will not be able in this way to make predictions about the effectiveness of a new attraction, but that we can more accurately trace the precise effect of past investments in order to (for instance) use the Attraction Response Matrix to find an explanation for the effect that is identified. And by this means we can increase the chance for a successful investment in future.

A few explanations for the unpredictable

In Chapter 6 and 7 I showed two methods by means of which explanations could be found for differences in the effectiveness of attractions. The article on co-branding shows that the negative return from the PandaVision attraction appears to be related to its lack of connection with the brand essence and brand assets of the park. New attractions will have a better chance of high return if they are a better match with the brand. A brand is a promise made and kept (Keller, 2003b) and if new attractions do not fulfil the brand promise, that puts the brand equity under pressure (Franzen & Van den Berg, 2002). In the case of PandaVision, it was found that the average appreciation of the core associations with the Efteling, an important part of the psychological brand equity, had declined (Chapter 6). The negative ROI of PandaVision as found by Van Oest et al. (2010) could thus come out even more strongly than they calculated, because the reduction in the average valuation of the core associations would also appear to suffer a negative influence with regard to future attractions. This effect of (mis)match with the brand applies in any case to the Efteling as a theme park. The extent to which it applies to other theme parks, let alone amusement parks, is uncertain. My view is that other parks could study this aspect and might come to the same results, though this is not necessarily the case. I believe that the reason the Efteling has been acclaimed many times in the past decade as one of the strongest brands in The Netherlands is the lessons this brand has learned through this kind of research. Although a certain nuance in brand thinking can only do good for a park, I think that the strength and direction of the brand is one of the success factors of the company based in Kaatsheuvel.

The article on theming has a rather different approach. First, it shows how theming can be measured, and then the effect of theming on visitor numbers. The study makes a distinction between eleven different theming categories and the related processing levels (Chapter 7). This latter aspect is based on the widely acknowledged and popular MAO model (Batra & Ray, 1986). The model based on this research assumes that for successful theming, the visitor must have motivation, ability and opportunity. The motivation is determined by factors such as the degree of theming and the theming match. The most significant outcome of this study is that in all cases, more theming leads to higher visitor numbers. The usual differences were found between amusement parks and theme parks, and between large and small parks, but the general picture is clear: the more theming, the more visitors. It is also true that the presence of motivation, ability and opportunity leads to heightened effects. Whether causality is involved is a question this study did not determine. Park managers can also apply this method to the degree

of thrill, indoor versus outdoor attractions, etc. If the effect of each individual attraction is determined, attractions can also be compared in groups. This method also increases insight into the effectiveness of new attractions. This is certainly true if the outcomes are not regarded as the end point of the analysis, but as the starting point for an organisation-wide discussion of the subject.

8.2. Opinions of industry professionals

In the past few years I have had the privilege to speak with many people in the industry about this subject. First of all, of course, I got to speak with the many persons involved at the parks that participated in the econometric study, including owners, members of the board of directors, general managers, people in charge of research and development, human resources, marketing, operations and designers. Without exception, all these people were positive about the research and the results. This will, in part, be because of how the research is presented. A predictive validity of over 98% and in one case even 99.9% quickly appeals to the imagination and counters any criticisms on the basis of convincing argumentation. There was, of course, a certain amount of self-selection. Parks that did not believe in this research did not participate and even among the participating parks this effect may have been present. If you didn't believe in the study in question, you don't join the task force working on it. Nevertheless, the responses could have been neutral or even negative. However, in my view the reason this was not the case was primarily because of the tone set in the research. The research was always presented as an aid to reduce uncertainty associated with decision-making and not as an absolute answer as such. The results were discussed with the management team/task force and further explored by means of a so-called wonder session. I first gave the parks detailed insight into the way the research was conducted and explained any weak points of the research, such as missing data, short time frames, missing variables in the final model (often this was the marketing budget, allocation of the communications budget, position of competitors, special offers and countless interaction variables), imprecision of certain variables, outliers and other matters. A discussion then took place regarding the outcomes for the park in question—first in a general sense, i.e. the average effect of all investments in the data set and what we can learn from them. We then had a discussion of the results per attraction location and insights were exchanged regarding why certain attractions are so much more, or less, successful than others. These discussions were experienced as very valuable by the participating parks and in all cases they led to internal follow-up sessions.

In addition to the above conversations, I also spoke with representatives of parks that did not participate in the econometric study, but did participate in the management study as reported in Chapter 3. These respondents showed a somewhat more diffuse picture. Most participating parks were also enthusiastic about the research and the possibilities/impossibilities which it described. However, there were a few exceptions. Roland Kleve, Alison Armor and Neil Corbett, speaking for Disneyland Resort Paris, indicated that the research was very worthwhile, that the right questions were being asked, but it simply was not possible to find answers to them. Disney has been working for more than 25 years to model this type of effect and includes the most improbable variables in its model, such as the 'puke factor' in thrill rides. Despite years of trying, Disney has not yet succeeded in realising a sufficiently appealing result. I have discussed the reason for this above and, in my view, it has to do with the complexity and dynamics of the organisation. A metaphor might help to better explain this. If a tiny mouse and a great big elephant walk over a bridge together and you want to measure the load of the mouse on the bridge, you have to use very precise instruments to do it. But it can be done. However, if not one, but six mice are walking over the bridge together and you want to determine the

effect of each individual mouse, your task becomes extremely difficult if not impossible. At Disney so many variables change every day that it is like the six-mouse metaphor. For most parks in Europe, however, the complexity and dynamics are considerably smaller. Europa-Park, with 4 million visitors, is the second largest park in Europe, and probably along with PortAventura in Spain one of the most complex and dynamic parks after Disneyland Resort Paris. At this park, too, the management believe in the importance of this research but were of the opinion that the statistical analyses would never manage to live up to the gut feeling and enterprising spirit of the organisation. There are simply too many factors in play that are ultimately crucial to a successful business operation and, the park believed, these could not all be factored into the model. However, the company does believe strongly in a systematic way of working in which they listen carefully to the wishes and needs of the guest in order to develop better service. Within this company, however, new ideas are often developed based on a strong internal sense, and these ideas are subsequently closely monitored from a consumer experience perspective. The outcomes of the research into theming also appeal strongly to the park. This is not illogical, because of all the parks studied Europa-Park, along with the two Disney parks, scores the highest on microtheming. Love for detail is evident in Europa-Park's entire approach to the market. I have also noticed that there are parks that do believe in the method of modelling and say as much at the end, but like Europa-Park they question the possibility of modelling. Walibi World, for instance, said that they would love to have a golden formula but that given the complexity and the number of factors involved, it is very unlikely such a formula could be found; what it comes down to is sound business instinct.

Meeting Harrison "Buzz" Price...

In October 2009, I had the privilege of presenting my research to Bob Rogers (formerly in imagineering at Disney) and for more than 25 years the director/owner of BRC Consultancy, the leading imagineering agency in the world. For an hour he said absolutely nothing, his dark eyes just staring at me from under heavy eyebrows. I considered this presentation as my final practical crash test, and in the course of the presentation began to feel that my research would not stand up to these industry heavyweights. After an hour Bob finally broke his silence with just a few words: "Wow, that's interesting. This is a great tool to take calculated risks. You should meet Harrison "Buzz" Price. I'll arrange a meeting for you." And so he did. One month later, during the IAAPA in Las Vegas, I spoke with Harrison "Buzz" Price, the financial and analytical genius behind Walt Disney. He was also Disney's personal friend. This man convinced Walt to invest his money in the Florida swamps and was the advisor of the Disney company for more than fifty years. And there I was, sitting at my ease, talking to him about my research. His health was clearly no longer what it was, but his humour and the strength of his mind were clearly unabated. In his book *Walt's Revolution! By the Numbers*, he discusses his insights and ultimately the impossibility of calculating the effects of new investments in attraction parks. The explained variation of his model did not exceed a few percentage points, because the data that he collected expressed an almost totally random relationship. Degree of investment resulted in a nearly random response on attendance, positive to negative. But random or not, according to "Buzz" Price each of these points has its own unique story to tell. And that is precisely what he liked so much about my work. "Great, you're adding some new dots to my model. That's good, and you know 'the art is beating the average'. Take calculated risks, that's what made Disney so great."

Accessible knowledge sharing

In 2010, I made presentations to the Dutch industry associations Club van Elf, Toerned, Recron and Koninklijke Horeca Nederland. I also published accessible articles in NRIT Magazine and Recreactie, to stimulate the conversation with the industry. These articles and publications did lead to spontaneous

feedback and requests for me to come present a more detailed explanation of my method and results. The subject turns out to have, or have gained, a wide base of interest in the industry. It also appears to somewhat reduce uncertainty for the interested parks with regard to investing, while at the same time increasing the chance for successful investment. In October and November 2010, I rounded off my research by giving presentations to international representatives of the industry. In October I presented my results and method during the European Attraction Show in Rome. My audience was a group of 30 participants from the Institute for Attraction Managers programme at IAAPA Europe. The participants were a geographically diverse group of nearly 20 nationalities and that made the feedback especially valuable. In general, the participants found the content of the presentation a little too academic, but nevertheless seemed to appreciate the practical possibilities. The participants from the new and rising park countries (including Russia, Estonia and Poland) indicated that the issue was not yet high on their agenda. Participants from countries with more established parks, such as the United Kingdom, Italy, The Netherlands and France, on the other hand, said they considered it one of the top priorities of their companies to gain more insight into the possibilities and impossibilities of this research. A month later, I gave a more detailed presentation during the IAAPA expo in Orlando. This presentation was attended by more than 100 interested parties from all over the world, and moreover from various branches of our industry, such as theme and amusement parks, water parks, zoos, aquariums, museums, science centres and the supply industry. In this presentation I used an accessible step-by-step approach to explain how those present could carry out the studies themselves. An audio recording of my presentation can be ordered via the IAAPA website. The immediate, spontaneous responses after the event were very positive (otherwise one probably would not spontaneously come up and talk to the speaker), and the written evaluation also indicated that those present found the presentation interesting and informative. In the week after the IAAPA expo I received e-mails from about 10 attendees with additional questions and as a result of the presentation I am linked with another 20 interested persons via Linkedin. Although in my view, my presentation clearly emphasised that predicting the unpredictable is not possible, it is striking to observe that many responses have that tendency. It could indicate that for many parks, innovations have an incremental instead of step-wise character and that for them, "it's better to be vaguely right than precisely wrong." I will return to this point in the closing section.

8.3. Closing remarks

If I make the balance sheet up, considering all in all, I would observe that my original naivety and simple positivistic scientific notions quickly underwent a change into a more critical realistic understanding, but the desire still ruled my thoughts for some time after. In the first six months of my dissertation, I began to have doubts that things like creativity and step-wise innovations can be modelled or predicted. Within the first year, this doubt had already become a conviction that this was, in fact, impossible. The first results of my own research gave such a diverse picture that I was able to do nothing more than observe that my strong desire to find a "golden Cornelis guideline for attraction park investments" was no more than a utopian dream. Thus, in the subsequent period my research developed into an effort to find an alternative to nevertheless increase the accountability of investments in attractions, the original aim of the study. In my quest for an alternative to predictability, I developed the Attraction Response Matrix and continued this detour in two so-called explanatory chapters. If I had really experienced from the beginning the impossibility of predicting the unpredictable, this Attraction Response Matrix probably would never have seen the light of day; instead, my research would have focused more on the process-related side of investing, creativity and innovation, and on the strategies organisations use to handle the tension between creativity and predictability.

It may be a bit late in the day to discuss these matters in detail in this last section, but it would at the same time be a missed opportunity if I did not spare a few words for them here.

Strategies for risk spreading and limitation

In his book, Hesmondhalgh (2007) describes nine distinguishing characteristics of the cultural industries that are crucial to the way organisations in this industry operate their businesses. I am of the opinion that four strategies described here are recognisable in the theme park market:

- Formatting: stars, genres and serials
- Loose control of symbol creators, but tight control of distribution and marketing
- Concentration, integration and co-opting publicity
- Misses are offset against hits by building a repertoire

In Chapter 2, I made a distinction between theme parks in the broader definition and theme parks in the more limited definition, indicating that the distinction between theme parks and movie parks on the one hand and amusement parks and European pleasure gardens on the other is a matter of degree, a question of balance between a park's functional and communicative aspects. Amusement parks and pleasure gardens signify as well and are also open to interpretation, but the primary aim of amusement parks and pleasure gardens is not meaning, but amusement and pleasure, whereas for theme parks and movie parks the primary aim is the production of meaning. This difference means that Hesmondhalgh's strategies listed above apply primarily to theme parks (in the limited sense). These parks, in particular, have to deal with the importance of the creativity necessary for the production of meaning and that is why they utilise the above strategies to limit their risks. They create content that is ultimately manifested through the symbolic world in the form of attractions, shows, concessions and retail outlets in the park, and that is a risky business. The results of my research, however, show wide differences in the effectiveness of new attractions at amusement parks. In my view these parks, too, would benefit from using the strategies of formatting and repertoire building, as is made clear from the results regarding theming which are presented in Chapter 7.

Inspiring leadership

The literature is fairly unanimous with regard to the most important success factors for innovation. Creating the right organisational culture is far and away the most important thing an organisation can do to increase its chances for successful innovations, and to achieve the right culture, strong leadership is required (Goffee & Jones, 1998; Hargadon & Sutton, 2000; Kuczmarski, 1996). First of all, this leadership must manifest itself at the top level of the organisation, but of course it must also be present at all other relevant levels of the organisation. The leadership that is needed is motivating leadership that inspires personnel to go the extra mile, something that is often needed for innovative projects (Goffee & Jones, 1998). But because there is more to innovation than creativity — implementation is also involved—an organisation needs strong management that can steer people in the right direction, monitor processes and structures, and ensure efficient performance. I have the impression that this latter point is not a weakness in most organisations (see also my remark regarding McDonaldization in section 2.4), but that the challenge is in creating and facilitating a culture based on trust, daring and risk-taking. Good managers are certainly not always inspiring leaders.

Inspiring leaders tolerate risk and are open to step-wise changes rather than incremental ones. These leaders create the right kind of company culture — a culture of experimentation in which mistakes are accepted as part of the process. Making mistakes is seen as an accelerated learning process and an inspiring leader will encourage this. They more often use emergent strategies instead of planned strategies (Hatch, 1997). This means that they combine top-down planning with structures that allow for reactions to insights and activities from all levels of the organization. Therefore, they work out of a clear vision and mission to which they are highly committed (Geurssen, 1996). The approach is fluid, focused, flexible and based on conditional-go decisions (Cooper, 1994; Geurssen, 1996), and for them, the work must be fun. An important added advantage is that the acceptance of failures increases and encourages the vital urge to experiment. Moreover, these leaders overstep the possible objections to collaboration. They know that trust requires that collaboration be sought both internally and externally. Often, collaboration is a one-sided process in which there is no chance of full reciprocity, but nevertheless, inspiring leaders dare to seek out this collaboration. They offer a second chance where they believe it would ultimately be better for both parties to find a way forward together (Hargadon & Sutton, 2000).

Knowledge-creating organisation

The final aspect I want to discuss here is the importance of a knowledge-creating organisation. In our industry, perhaps more than in others, we have career patterns where it is possible to go from concessions vendor to director. If you stay in the organisation long enough, you can get pretty far without a lot of prior education. There are plentiful examples of managers who began as holiday or temporary employees and gradually made it to the top of the organisation. It requires perseverance and a strong dedication to the organisation, but any entry-level staff member can eventually achieve a good career in the industry. This means that it is important to recognise the management of tacit knowledge (knowledge connected to the individual who possesses it). In the course of the years, such an individual accumulates an enormous quantity of knowledge that is by nature personal and therefore difficult to articulate and manage (Nonaka & Takeuchi, 1995). A knowledge-creating company has the ability to tap into this tacit knowledge. A body of knowledge is also needed for creativity, because creativity is relating a concept to a particular body of knowledge. The existing body of knowledge is as vital as the novel idea. A possible disadvantage is that this knowledge can impose limitations on the rest of the organisation (Quintas, Lefrere & Jones, 1997) and it is therefore important to know where the hindrance lies and where, instead, the knowledge can be used to cause the organisation to flourish. Leaders will have to impartially determine where tacit knowledge is usable and where it would slow the organisation down.

Beat the average and take calculated risks

I could devote some attention to the five generations of New Product Development and describe the ways to systems integrating and networking models (Rothwel, 1992), or work out an argument about fuzzy front end approaches (Khuran & Rosenthal 1997), discuss the rich ideas of Hesmondhalgh (2007), summarise all the books about Disney imagineering or put forward a line of reasoning about the necessity (or not) of constraints for creative minds (Geurssen, 1992 en 1996). Any of these would be interesting, but I think that I have already made my point. It is difficult to predict the success of investments in our industry, but on the other hand outcomes are not completely random either. We must beat the average—and if we have good people at all levels, who are prepared to share their knowledge, take calculated risks and display trust in each other and in the process, we can do it.

Epilogue

Writing this dissertation has, at times, been a frustrating process. Before I began this dissertation, I had the idea that I would write a book about my knowledge and insights about the industry, saying whatever I wanted. Now, however, I can say that what I have lost in illusions I've gained in experience. I would not have wanted to miss out on this experience — nor the illusion, in fact. Writing for academic journals is a process which I have found really puts intellectual freedom to the test. To get an article published, one must frequently make compromises: conclusions are stretched further than one would really want, limitations are veiled and the relevance of nuances is magnified. These are only a few examples. Anyway, this is the afterword and I am now free to say what I really think.

In terms of process I am very enthusiastic about this dissertation. I will return to this point below. The end product, however, leaves me with a slight feeling of frustration. This dissertation raised more questions than it ultimately answered. I understand that this can be regarded as a great side effect of the quest I have begun, but it's not exactly satisfying. I could easily fill the rest of my academic career working on the unanswered questions, all of which are very relevant from an academic perspective. I remember one of the first conversations with Hans Mommaas in which I indicated that I was a little trepidated about my first publication, fearing that I might have overlooked something. Hans laughed and answered that there still had to be things left to research after my dissertation was finished. Whereas I saw my dissertation as a culmination of years of research, he regarded it merely as the entrance examination to the academic world. And if that is the case, there must indeed be something left to research in that academic world. Well, you have seen that I have done my best to provide myself with plenty of work for the next few years! But to be honest, the majority of these newly evoked questions are not of the highest importance and urgency. In many cases I wonder whether it really brings the industry much closer to fulfilling its role of making the world a little bit more beautiful, even if just for a short time. For instance, it is nice to know that you have a thorough and exhaustive list of all the attractions, because it gives you a better chance of making reliable generalisations about the effects of historical investments, but does it also fall under the category of "need to know"? Does it make the unpredictable any more predictable and will this knowledge ultimately lead to the breakthrough innovations that make our world more beautiful? My view on this question should be clear by now.

The questions that were answered in this dissertation ultimately could have been given more depth and breadth. I was aware of this from the very start of my work, and thus it was also quite a conscious choice. In the beginning Hans Mommaas and Salvador Anton Clavé made serious attempts to give my work a broader framework (Hans in particular) and a little more depth (Salvador in particular), but with a certain firmness of purpose I largely declined their advice. In my research proposal of January 2008, I included the following aims for my doctoral research:

- *several years of in-depth research on an interesting and appealing topic;*
- *access to interesting companies and people (including Disney);*
- *visits to interesting conferences, workshops etc. (incl. Recron, TEA, IAAPA congresses);*
- *acquiring specialised/expert knowledge in a specific subject;*
- *gaining respect from colleagues through my specialist knowledge;*
- *enjoy focus and repose in my work;*
- *give international papers and presentations regarding the relevant study and research field;*
- *provide insights to the industry in the relevant research area.*

As a basic condition I intend to be finished within the set NHTV time limit.

As indicated, in terms of process I am very enthusiastic about my dissertation. I was able to achieve all the aims above, without exception or limitation. It is still fascinating to find that with the right strategy, some effort, perseverance and focus you can achieve everything in life. Even if the goals seem miles away at first, "if you can dream it, you can do it" (Walt Disney). From the very first moment, I took the NHTV's requirements very seriously. Getting paid two days a week for three years to work on your dream is a wonderful offer, but to write a dissertation it is too short a time. This latter work, however, was the purpose of the organisation in starting this process with me. Thus, at the beginning I set two clear parameters for the assignment in order to get it done within the allotted time. The subject had to be interesting enough that I would want to work on it forty hours a week, even in times that other work would be requiring much of my attention. And in the second place, the subject had to be delineated in such a way that, given the time I had to work, it could really be finished in three years. So it was that I displayed a little persistence in meetings with my two academic supervisors, often against my own inclination. I trusted in the path I was walking, but at the same time I knew that this PhD research could have yielded more if I had taken more integrally on board the valuable advice of Hans and Salvador. And yes, at the end of the ride I am paying the price for that. That sounds a little more severe than I feel about it, because as I've said I met all my goals and I can happily live with the quality of this dissertation and with its insights. I have worked with very great pleasure on this dissertation and am thankful for what I've been able to experience and learn in the past three years. I believe I have met my goal of contributing a small piece to the further success of our wonderful industry, and thereby to a happier and more beautiful world. The piece could have been a bit bigger, but...

From the day we arrive on the planet
And blinking, step into the sun
There's more to see than can ever be seen
More to do than can ever be done
There's far too much to take in here
More to find than can ever be found
But the sun rolling high
Through the sapphire sky
Keeps great and small on the endless round

It's the Circle of Life
And it moves us all
Through despair and hope
Through faith and love
Till we find our place
On the path unwinding
In the Circle
The Circle of Life

It's the Circle of Life
And it moves us all
Through despair and hope
Through faith and love
Till we find our place
On the path unwinding
In the Circle

The Circle of Life

References

Aaker, D. A. (1991). *Managing brand equity: Capitalizing on the value of a brand name*. New York: The Free Press.

Adams, J. A. (1991). *The American amusement park industry. A history of technology and thrills*. Boston: Twain Publishers.

Ah-Keng, K. (1993). Evaluating the effectiveness of a new theme park: A cross-cultural comparison. *Tourism Management, 14*(3), 202-210.

Ahmadi, R. H. (1997). Managing capacity and flow at theme parks. *Operations Research, 45*(1), 1-13.

Ambler, T. (2003). *Marketing and the Bottom Line*. London: FT Prentice Hall.

Anton Clavé, S. (2007). *The Global Theme Park Industry*. Cambridge, MA: CABI.

Backx, R. (2006). *Force of attraction.* Tilburg University, Tilburg.

Barnes, B. (2009). Universal Lifts the Veil on a Harry Potter Park. The New York Times, from *http://www.nytimes.com/2009/09/16/business/media/16harry.html*, (Retrieved 9 September 2009).

Batra, R., & Ray, M. L. (1986). Situational effects of involvement and message content on information processing intensity. *Journal of Consumer Research, 12* (March), 432-445.

Bigné, J. E., Andreu, L., & Gnoth, J. (2005). The theme park experience: An analysis of pleasure, arousal and satisfaction. *Tourism Management, 26* (6), 833-844.

Blackett, T., & Boad, B. (1999). *Co-branding: The science of Alliance*. London: MacMillan Press.

Boje, D., & Dennehy, R. (1993). *Postmodern management: America's revolution against exploitation*. Dubuque, IA: Kendall-Hunt Press.

Bonn, M. A., Furr, H. L., & Dai, M. (2005). Economic Growth and Recession Time Periods: Their Effect Upon Pleasure Travelers Visiting Florida Theme Parks. *FIU Hospitality Review, 23*(2), 19-32.

Boo, S., & Jones, D. L. (2009). Using a validation process to develop market segmentation based on travel motivation for major metropolitan areas. *Journal of Travel & Tourism Marketing, 26*(1), 60-79.

Boone, J. M. (1997). Hotel-restaurant co-branding: A preliminary study. *Cornell Hotel & Restaurant Administration Quarterly, 38*(October), 34-43.

Botterill, J. (1997). *The 'fairest' of the fairs: A history of fairs, amusement parks and theme parks*. Simon Fraser University, British Colombia.

Boyd, S. W. (2008). Marketing challenges and opportunities for heritage tourism. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing visitor attractions: New directions* (2nd ed., pp. 283-294). Oxford, UK: Butterworth-Heinemann.

Braun, B. M., & Milman, A. (1994). Demand Relations in the Central Florida Theme Park Industry. *Annals of Tourism Research: A social sciences journal, 21*(1), 150-153.

Braun, B. M., & Soskin, M. D. (1999). Theme Park Competitive Strategies. *Annals of Tourism Research, 26*(2), 439-444.

Braun, B. M., & Soskin, M. (2003). Competitive theme park strategies: lessons from central Florida. In A. Fyall, B. Garrod & A. Leask (Eds.), *Managing visitor attractions: New directions* (pp. 220-235). Oxford, UK: Butterworh-Heinemann.

Braun, B. M., Soskin, M. D., & Cernicky, M. (1992). Central Florida Theme Park Pricing: Following The Mouse. *Annals of Tourism Research, 19*(1), 131-136.

Broadbent, S. (1997). *Accountable advertising: A handbook for managers and analysts*. Henley-on-Thames, UK: Admap Publications.

Brown, B. J. (2002). Landscapes of Theme Park Rides: Media, Modes, Messages. In T. Young & R. Riley (Eds.), *Theme Park Landscapes: Antecedents and variations* (pp. 235-268). Washington, DC: Dumbarton Oaks Research Library and Collection.

Bryman, A. (1995). *Disney and his worlds*. London: Routledge.

Bryman, A. (1999a). The Disneyization of society. *The sociological review, 47,* 25-47.

Bryman, A. (1999b). Theme parks and McDonaldization. In B. Smart (Ed.), *Resisting McDonaldization* (pp. 101-115). London Sage.

Bryman, A. (2004). *The Disneyization of Society*. London: Sage.

Budd, M., & Kirsch, M. H. (2005). *Rethinking Disney: Private Control, Public Dimensions*. Middletown, CT: Wesleyan University Press.

Camp, D. (1997). Theme Parks In Europe. *Travel & Tourism Analyst, 5*, 4-21.

Camp, D. (2001). Europe - A Single Leisure market. *Journal of Leisure Property, 1*(2), 127-135.

Capodagli, B., & Jackson, L. (2007). *The Disney way: Harnessing the management secrets of Disney in your company* (Rev. ed.). New York: McGraw Hill.

Carter, C. F., & Williams, B. R. (1957). *Industrial and technical progress*. London: Oxford University Press.

Catchings-Castello, G. (2000). The ZMET Alternative. *Marketing Research, 12*(2), 6-12.

Cebula, R. J., & McGrath, R. D. (2005). Evidence of liquidity constraints found in theme park ticket auctions. *Journal of Economics and Finance, 29*(1), 112-121.

Celsi, R. L., Rose, R. L., & Leigh, T. W. (1993). An exploration of high-risk leisure consumption through skydiving. *Journal of Consumer Research, 20*(1), 1-23.

Chassé, S. (1993). Les parcs thématiques et le tourisme. *Téoros, 12*(3), 2.

Chen, P. J. (2008). Exploring unspoken words: Using ZMET to depict family vacationer mental models. *Advances in Hospitality and Leisure, 4*, 29-51.

Christensen, G. L., & Olson, J. C. (2002). Mapping Consumers' Mental Models with ZMET. *Psychology & Marketing, 19*(6), 477-502.

Clements, M. P., & Hendry, D. F. (1998). *Forecasting Economic Time Series*. Cambridge: Cambridge University Press.

Cliff, J. (2007). It's All in the Numbers. *Funworld, 23*(11), 121-133.

Cole, S. T., & Scott, D. (2004). Examining the Mediating Role of Experience Quality in a model of Tourist Experiences. *Journal of Travel & Tourism Marketing, 16*(1), 79-90.

Cooke, S., & Ryan, P. (2000). Brand alliances: From reputation endorsement to collaboration on core competencies. *Irish Marketing Review, 13*(2), 36-41.

Cooper, C., Fletcher, J., Fyall, A., Gilbert, D., & Wanhill, S. (2005). *Tourism: Principles and practice* (3rd ed.). Harlow, UK: Pearson Education Limited.

Cooper, R. G. (1994). Third-generation new product processes. *Journal of Product Innovation Management, 11*, 3-14.

Cornelis, P. C. M. (2003). *Branding in de vrijetijd: Psychologisch commitment en functionele experience merken.* Tilburg University, Tilburg.

Cornelis, P. C. M. (2005). Dromen over de Panda? De invloed van merkallianties op de waardering van merken volgens de IBRA-methode. *Vrijetijdstudies, 23*(2), 21-32.

Cornelis, P. C. M. (2007). *Research proposal 'Accountability and European theme parks'*, NHTV Breda University of Applies Sciences, Breda.

Cornelis, P. C. M. (2008, July 5th). *Attraction accountability: the impact of new attractions on the performance of European theme parks (towards an Attraction Response Matrix).* Paper presented at the 4th International Conference on Tourism, Athens.

Cornelis, P. C. M. (2009). Build and they will come...but what's the return on investment. *ParkWorld, March 2009*(3), 34-35.
Cornelis, P. C. M. (2010a). Achieving Attraction Accountability Through an Attraction Response Matrix *Journal of Travel & Tourism Marketing, 27*(4), 361-382.
Cornelis, P. C. M. (2010e). Attraction accountability: the impact of new attractions on the performance of European theme parks (towards an Attraction Response Matrix). In K. Margarita & D. Tixier (Eds.), *Challenges and Prospects in Tourism Research: 4th International Conference on Tourism* (pp. 283-296). Athens: Atiner.
Cornelis, P. C. M. (2010c). Effects of co-branding in the theme park industry: A preliminary study. *International Journal of Contemporary Hospitality Management, 22*(6), 775-796.
Cornelis, P. C. M. (2010b). Impact of New Attractions on Theme Park Attendance *Worldwide Hospitality and Tourism Themes Journal, 2*(3), 262-280.
Cornelis, P. C. M. (2010d). De strijd om differentieel concurrentievoordeel: Non-prijsstrategieën binnen de markt van attractieparken. In K. de Bruijn (Ed.), *Trendrapport toerisme, recreatie en vrije tijd 2009/2010*. Breda: NRIT Onderzoek.
Cornelis, P. C. M. (2011 forthcoming). The impact of (not) theming an attraction in the global theme park industry. *Journal of Travel & Tourism Marketing, 28*(??), ??
Cornelissen, F. (2010). *Does it have fur or feathers? A categorisation of theme park attractions*. Tilburg University, Tilburg.
Corning, J., & Levy, A. (2002). Demand for Live Theater with Market Segmentation and Seasonality. *Journal of Cultural Economics, 26 (August)*, 217-235.
Crouch, G. I. (1994). The Study of International Tourism Demand: A Survey of Practice. *Journal of Travel Research, 22 (Spring)*, 41-55.
Csikszentmihalyi, M., & Csikszentmihalyi, I. S. (1992). *Optimal experience: Psychological studies of flow in consciousness* (1st paperback ed.). Cambridge, MA: Cambridge University Press.
Coulter, R., A. , Zaltman, G., & Coulter, K., S. (2001). Interpreting consumer perceptions of advertising: An application of the Zaltman Metaphor Elicitation Technique. *Journal of Advertising, 30*(4), 1-21.
Curwen, P. (1995). EuroDisney: The mouse that roared (not). *European Business Review, 95*(5), 15-20.
Dagevos, J. C. (2000). De betovering van Ritzer *Sociologische Gids, 5*(5), 401-409.
Darnell, A. C., & Johnson, P. S. (2001). Repeat Visits To Attractions: A Preliminary Economic Analysis. *Tourism Management, 22*(2), 119-136.
Davidson, R. (1998). *Travel and Tourism in Europe*. Harlow, UK: Longman.
Davis, S. G. (1996). The theme park: Global industry and cultural form. *Media, Culture & Society, 18*, 399-422.
Davis, S. G. (1997). *Spectacular nature: Corporate culture and the Sea World experience*. Berkeley, CA: University of California Press.
Davis, S. G. (2004). The theme park: Global industry and cultural form. In S. Williams (Ed.), *Tourism: Critical concepts in the social sciences* (pp. 130-152). London: Taylor & Francis.
Disney Institute. (2001). *Be our guest: Perfecting the art of customer service*. New York: Disney Editions.
Dijksterhuis, A. (2007). *Het slimme onbewuste: Denken met gevoel*. Amsterdam, The Netherlands: Uitgeverij Prometheus.
Donaire, J. A. (1999). I nuovi spazi del turismo. Tempo libero e territorio nella società post-industriale. *Archivio di Studi Urbani e Regionalli, 65*, 7-27.
Doyle, P. (2000). *Value-Based Marketing*. New York: John Wiley & Sons.
Dube, L., & Le Bel, J. (2003). The content and structure of laypeople's concept of pleasure. *Cognition & Emotion, 17*(2), 263-296.

Dube, L., & Menon, K. (2000). Multiple roles of consumption emotions in post-purchase satisfaction with extended service transactions. *International Journal of Service Industry Management, 11*(3), 287-304.

Ebster, C., & Guist, I. (2004). The role of authenticity in ethnic restaurants. *Journal of Foodservice Business Research, 7*(2), 41-52.

Efteling. (2005). *Annual Report Efteling 2004*. Kaatsheuvel, The Netherlands: Author.

Efteling. (2006). *Annual Report Efteling 2005*. Kaatsheuvel, The Netherlands: Author.

Efteling. (2007). *Annual Report Efteling 2006*. Kaatsheuvel, The Netherlands: Author.

ERA/AECOM. (2009). *European Amusement and Theme Park Industry: An Assessment of Economic Impact of Onsite Visitor Spending* Alexandria, VA: IAAPA.

EuroAmusementProfessional. (2009). Die Parksaison 2008. *EuroAmusement Professional,* 8-14.

Feddes, F. (1998, 23 september 1998). Door een waas van groen, de eeuwige Efteling. *De Groene Amsterdammer*.

Feifan Xie, P., & Wall, G. (2008). Authenticating ethnic tourism attractions. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing visitor attractions: New directions* (2nd ed., pp. 132-147). Oxford, UK: Butterworth-Heinemann.

Fichtner, U. (1997). Freizeitsparks - traditionell inszenierte Freizeitwelten vor neuen Herausforderungen? In A. Steinecke & M. Treinen (Eds.), *Inszenierung im Tourismus* (Vol. 3, pp. 78-97). Trier, Germany: Europaisches Tourismus Institut GmbH.

Field, A. (2005). *Discovering Statistics Using SPSS* (2nd ed.). London: Sage Publications.

Fjellman, S. M. (1992). *Vinyl leaves: Walt Disney World and America*. Boulder, CO: Westview Press.

Fodness, D. D., & Milner, L. M. (1992). A Perceptual Mapping Approach To Theme Park Visitor Segmentation. *Tourism Management, 13*(1), 95-101.

Fok, D., Horváth, C., Paap, R., & Franses, P. H. (2005). *A Hierarchical Bayes Error Correction Model to Explain Dynamic Effects of Price Changes*. Rotterdam, The Netherlands: Erasmus University.

Ford, R. C., & Milman, A. (2000). George C. Tilyou - Developer of the Contemporary Amusement Park. *Cornell Hotel & Restaurant Administration Quarterly, 41*(4), 62-71.

Formica, S., & Olsen, M. D. (1998). Trends in the amusement park industry. *International Journal of Contemporary Hospitality Management, 10*(7), 297-308.

Fournier, S., & Mick, D. G. (1999). Rediscovering satisfaction. *Journal of Marketing, 63*(4), 5-23.

Franses, P. H. (1994). Modeling New Product Sales: An Application of Cointegration Analysis. *International Journal of Research in Marketing, 11*(5), 491-502.

Franses, P. H., & Paap, R. (2001). *Quantitative Models in Marketing Research*. Cambridge, MA: Cambridge University Press.

Franzen, G., & Bouwman, M. (1999). *De mentale wereld van merken*. Alphen aan den Rijn, The Netherlands: Samsom.

Franzen, G., & Goessens, C. (1998). *Merken & Reclame: Hoe Reclame-Effectiviteit Brand Equity Beïnvloedt*. Deventer, The Netherlands: Kluwer BedrijfsInformatie.

Franzen, G., & Van den Berg, M. (2002). *Strategisch management van merken*. Deventer, The Netherlands: Kluwer.

Fyall, A., Garrod, B., & Leask, A. (2003). Preface. In A. Fyall, B. Garrod & A. Leask (Eds.), *Managing Visitor Attractions: New Directions* (pp. xxi-xxiv). Oxford, UK: Butterworh-Heinemann.

Gabriel, Y. (2000). *Storytelling in organizations: Facts, fictions and fantasies*. New York: Oxford University Press.

Garnham, N. (1990). *Capitalism and Communication*. London: Sage.

Garrod, B. (2008). Managing Visitor Impact. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing Visitor Attractions: New Directions* (second ed., pp. 165-180). Oxford, UK: Butterworth-Heinemann.

Geursen, G. (1992). *Tijdens de verkoop gaat de verbouwing gewoon door: Over de nieuwe, chaotische orde in ons denken*. Houten, The Netherlands: Stenfert Kroese.

Geursen, G. (1996). *Virtuele tomaten en conceptuele pindakaas: Hoe interactiviteit, zelforganisatie en bewustzijnsverruiming de marketing op z'n kop zetten* (2nd ed.). Deventer, The Netherlands: Kluwer Bedrijfswetenschappen.

Gilmore, J. H., & Pine, B. J. (2007). *Authenticity: What consumers really want*. Boston: Harvard Business School Press.

Giroux, H. A. (1999). *The Mouse that Roared: Disney and the End of Innocence*. Lanham, ML: Rowman & Littlefield.

Goffee, R., & Jones, G. (1998). *The character of a corporation, how your company's culture can make or break your business*. New York: HarperCollins.

Gottdiener, M. (2001). *The theming of America: Dreams, media fantasies, and themed environments* (2nd ed.). Boulder, CO.: Westview.

Goulding, P. (2003). Seasonality: The perennial challenge for visitor attractions. In A. Fyall, B. Garrod & A. Leask (Eds.), *Managing visitor attractions: New directions*. Oxford, UK: Butterworth-Heinemann.

Grossman, R. P. (1997). Co-branding in advertising: Developing effective associations. *Journal of Product & Brand Management, 6*(3), 191-201.

Gunn, C. (1988). *Vacationscape: Designing Tourist Regions* (2nd ed.). Van Nostrand Reinhold.

Hall, C. M. (2008). Marketing and managing an attraction over time: The case of Hagley Park, Christchurch. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing visitor attractions: New directions* (2nd ed., pp. 295-312). Oxford, UK: Butterworth-Heinemann.

Hankinson, G., & Cowking, P. (1995). What do you really mean by a brand? *Journal of Brand Management, 3*(1), 43-50.

Hannigan, J. (1998). *Fantasy city: Pleasure and profit in the postmodern metropolis*. London: Routledge.

Hargadon, A., & Sutton, R. I. (2000). Building an innovation factory. *Harvard Business Review, 78*(3), 157-166.

Harrison, S., & Bland, N. (2009). A pause in consolidation? *Attractions Management,* 30-33.

Harwood, E. (2002). Rhetoric, Authenticity, and Reception: The Eighteenth-Century Landscape Garden, the Modern Theme Park, and their Audiences. In T. Young & R. Riley (Eds.), *Theme park landscapes: Antecedents and variations*. Washington, DC: Dumbarton Oaks.

Hatch, M. J. (1997). *Organization theory, modern symbolic and postmodern perspectives*. Oxford, UK: Oxford University Press.

Heath, R. (2001). *The hidden power of advertising: How low involvement processing influence the way we choose brands* (Vol. 7). Oxfordshire, UK: Admap Publications.

Hesmondhalgh, D. (2007). *The Cultural Industries* (2nd ed.). London: Sage Publications Ltd.

Heskett, J. L., Sasser, W. E., & Schlesinger, L. A. (1997). *The Service Profit Chain*. New York: The Free Press.

Hogley, J., Chen, W., & He, D. (2005). *Southern California theme park attendance*. UCLAAnderson school of management, Los Angeles, CA.

Horváth, C., & Franses, P. H. (2003). *Deriving Dynamic Marketing Effectiveness from Econometric Time Series Models*. Rotterdam, The Netherlands: Erasmus Research Institute of Management.

IAAPA. (2007a). *Managing attractions for more profit: An international survey of operational performance*. Alexandria, VA: Author.

IAAPA. (2007b). *Expand your universe*: *IAAPA Attractions Expo 2007 conference & trade show program* Alexandria, VA: Author.
IAAPA. (2008). *Success in every direction*: *IAAPA Attractions Expo 2008 conference & trade show program* Alexandria, VA: Author.
IAAPA. (2009). *Bright lights, big show*: *IAAPA Attractions Expo 2010 conference & trade show program* Alexandria, VA: Author.
IAAPA. (2010). *IAAPA Attractions Expo 2010 conference & trade show program*. Alexandria, VA: Author.
IAAPA Europe. (2008). *European Attractions Show Munich: Onsite catalogue*. Bruxelles, Belgium: Author.
IAAPA Europe. (2009). *European Attractions Show Amsterdam: Onsite catalogue*. Bruxelles, Belgium: Author.
IAAPA Europe. (2010). *European Attractions Show Rome: Onsite catalogue*. Bruxelles, Belgium: Author.
Imagineers. (1996). *Imagineering: A Behind the Dreams Look at Making the Magic Real*. New York: Disney Editions.
Imagineers. (2003). *The Imagineering Way: Ideas to ignite your creativity*. New York: Disney Editions.
Imagineers. (2010). *Imagineering - A Behind the Dreams Look at Making MORE Magic Real*. New York: Disney Editions.
ING. (2002). *Sectorstudie Leisure Deelmarkten*. Diemen, The Netherlands: Papyrus.
Jansen, M. A. (2004). *Brand Alliances: Building strong brands together*. Deventer, The Netherlands: Kluwer.
Jones, C. B., & Robinett, J. (1998). The Future Role of Theme Parks in International Tourism. *Hotel Online: Ideas & Trends*.
Jones, K. R., & Wills, J. (2005). *The Invention of the Park: Recreational Landscapes from the Garden of Eden to Disney's Magic Kingdom*. Cambridge, MA: Polity.
Kaak, K. T. (1992). *Theme parkarama*. University of Texas, Austin, Texas.
Kapferer, J.-N. (1997). *Strategic brand management: Creating and sustaining brand equity long term* (2nd ed.). London: Kogan Page.
Keller, K. L. (2003a). Brand Synthesis: The multidimensionality of Brand Knowledge. *Journal of Consumer Research, 29*(4), 595-600.
Keller, K. L. (2003b). *Strategic brand management: Building, measuring, and managing brand equity* (2 ed.). Upper Saddle River, NJ: Prentice Hall.
Kemperman, A. (2000). *Temporal aspects of theme park behavior: Modelling variety seeking, seasonality and diversification to support theme park planning*. Eindhoven: Technische Universiteit Eindhoven.
Kemperman, A. D. A. M., Borgers, A. W. J., Oppewal, H., & Timmermans, H. J. P. (2000). Consumer choice of theme parks: A conjoint choice model of seasonality effects and variety seeking behavior. *Leisure Sciences, 22*(1), 1-18.
Kemperman, A., Borgers, A., Oppewal, H., & Timmermans, H. (2003). Predicting the duration of theme park visitors' activities: An ordered logit model using conjoint choice data. *Journal of Travel Research, 41*(4), 375-p. 375-384.
Kemperman, A. D. A. M., Joh, C., & Timmermans, H. J. P. (2004). Comparing first-time and repeat visitors' activity patterns in a tourism environment. In G. I. Crouch, R. R. Perdue, H. J. P. Timmermans & M. Uysal (Eds.), *Consumer psychology of tourism, hospitality and leisure* (Vol. 3, pp. 103-119). Wallingford, UK: CABI Publishing.
Kemperman, A. D. A. M., & Timmermans, H. J. P. (2006). Heterogeneity in Urban Park Use of Aging Visitors: A Latent Class Analysis. *Leisure Sciences, 28*(1), 57-71.
Khuran, A., & Rosenthal, S. R. (1997). Integrating the fuzzy front end of new product development. *Sloan Management Review, winter*, 103-120.

Kiel, H. J. (2002). Internationale Aspekte der Freizeitwirtschaft am Beispeil thematisierter Freizeitanlagen. In W. Pompl & M. Lieb (Eds.), *Internationales Tourismus-Management: Herausforderungen, Strategien, Instrumente*. Munchen, Germany: Franz Vahlen.

Kim, H., Cheng, C. K., & O'Leary, J. T. (2007). Understanding participation patterns and trends in tourism cultural attractions. *Tourism Management, 28*(5), 1366-1371.

Kim, W. C., & Mauborgne, R. (2005). *Blue ocean strategy: How to create uncontested market space and make the competition irrelevant*. Boston: Harvard Business School Press.

Kim, S., & Song, H. (1998). Analysis of Inbound Tourism Demand in South Korea: a Cointegration and Error Correction Approach. *Tourism Analysis, 3*(2), 24-41.

King, M. J. (1981). The new American Muse: Notes on the amusement/theme park. *Journal of Popular Culture, 15*(1), 56-62.

Kotler, P., & Keller, K. L. (2006). *Marketing Management* (12e ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Krider, R. E., & Weinberg, C. B. (1998). Competitive Dynamics and the Introduction of New Products: The Motion Picture Timing Game. *Journal of Marketing Research, 35 (February)*, 1-15.

Kuczmarski, T. (1996). *Innovation - Leadership strategies for the competitive edge*. Chicago: NTC Business Books.

Kulendran, N., & King, M. L. (1997). Forecasting International Quarterly Tourism Flows using Error Correction and Time Series Models. *International Journal of Forecasting, 13*(September), 319-327.

Kulendran, N., & Witt, S. F. (2001). Cointegration versus Least Squares Regression. *Annals of Tourism Research, 28*(2), 291-311.

Lanquar, R. (1991). *Les parcs de loisirs*. Paris: Presses Universitaires de France.

Lavasser, G. (1994). Perceptions of Quality. *Funworld,* 172-175.

Le Bel, J., L. (2005). Beyond the friendly skies: An integrative framework for managing the air travel experience. *Managing Service Quality, 15*(5), 437-451.

Leask, A. (2003). The nature and purpose of visitor attractions. In A. Fyall, B. Garrod & A. Leask (Eds.), *Managing visitor attractions: New directions* (pp. p. 1-15). Oxford, UK: Butterworh-Heinemann.

Lee, S., Kim, W. G., & Kim, H. J. (2006). The impact of co-branding on post-purchase behaviors in family restaurants. *Hospitality Management, 25*(1), 245-261.

Lenskold, J. D. (2003). *Marketing ROI*. New York: McGraw-Hill.

Leuthesser, L., Kohli, C., & Suri, R. (2003). 2 + 2 = 5? A framework for using co-branding to leverage a brand. *Brand Management, 11*(1), 35-47.

Levin, I. P., & Levin, A. M. (2000). Modelling the role of brand alliances in the assimilation of product evaluations. *Journal of Consumer Psychology, 9*(1), 43-54.

Li, M., Huang, Z., & Cai, L. A. (2009). Benefit segmentation of visitors to a rural community-based festival. *Journal of Travel & Tourism Marketing, 26*(5-6), 585-598.

Lieberman, A., & Esgate, P. (2002). *The entertainment marketing revolution: Bringing the moguls, the media, and the magic to the world*. Upper Saddle River, NJ: FT Prentice Hall.

Lim, C. (1997). An Econometric Classification and Review of International Tourism Demand Models. *Tourism Economics, 3*(1), 69-81.

Liu, Y.-D. (2008). Profitability Measurement of United Kingdom Theme Parks: An Aggregate Approach. *International Journal of Tourism Research, 10*(3), 283-288.

Loh, L. (2009). Sneak Preview: Universal Studios Singapore. *CNN Go Asia*, from http://www.cnngo.com/singapore/play/universal-studios-singapore-sneak-preview-853186, (Retrieved on 26 October 2009).

Loring, P. A. (2007). The Most Resilient Show on Earth: The Circus as a Model for Viewing Identity, Change, and Chaos. *Ecology and Society 12*(1), 9-20.

Loverseed, H. (1994). Theme parks in North America. *EIU Travel & Tourism Analyst*(4), 51-63.

Lukas, S. A. (2007). *The themed space: Locating culture, nation, and self*. Plymouth, UK: Lexington books.

Lukas, S. A. (2008). *Theme Park*. London: Reaktion Books ltd.

Maanen, J. v. (1992). Displacing Disney: Some notes on the flow of culture. *Qualitative Sociology, 15*(1), 5-35.

Mahajan, V., & Wind, J. (1992). New product models: Practice, shortcomings and desired improvements. *Journal of Product Innovation Management, 9*, 128-139.

Malhotra, N. K., & Birks, D. F. (2000). *Marketing Research, an Applied Approach* (European ed.). London: Pearson Education.

Marling, K. A. (1997). *Designing Disney's Theme Parks: The Architecture of Reassurance*. Paris: Flammarion.

Marcus, G. (1997). Forty years of overstatement: Criticism and the Disney theme parks. In: Marling, K.A. (ed.) *Designing Disney's Theme Parks. The Architecture of Reassurance*. Canadian Centre for Architecture, Montreal, 201-208

Martin, C. A., & Witt, S. F. (1989). Forecasting Tourism Demand: a Comparison of the Accuracy of Several Quantitative Methods. *International Journal of Forecasting, 5*(1), 7-19.

Martin, D., & Woodside, A. G. (2008). Grounded Theory of International Tourism Behavior. *Journal of Travel & Tourism Marketing, 24*(4), 245-258.

McClung, G. W. (1991). Theme Park Selection: Factors Influencing Attendance. *Tourism Management, 12*(2), 132-140.

McClung, G. W. (2000). Theme Park Selection: Factors Influencing Attendance. In C. Ryan & S. Page (Eds.), *Tourism Management: Towards the New Millennium*. Oxford, UK: Pergamon.

Milman, A. (1988). Market Identification of a New Theme Park: An Example from Central Florida. *Journal of Travel Research, 26*(4), p. 7-11.

Milman, A. (1993). Theme parks and attractions. In *VNR'S Encyclopedia of Hospitality and Tourism* (pp. 934-944). New York: Van Nostrand Reinhold.

Milman, A. (2001). The Future of the Theme Park and Attraction Industry: A Management Perspective. *Journal of Travel Research, 40*(2), 139-147.

Milman, A. (2009). Evaluating the guest experience at theme parks: An empirical investigation of key attributes. *International Journal of Tourism Research, 11*(4), 373-387.

Milman, A., Okumus, F., & Dickson, D. (2010). How far do theme parks and attractions contribute to social and economic sustainability of destinations? *Worldwide Hospitality and Tourism Themes Journal, 2*(3), 217-219.

Mitrašinovic, M. (2006). *Total Landscape, Theme Parks, Public Space*. Aldershot, UK: Ashgate.

Mommaas, H. (2003). *Vrije tijd in een tijdperk van overvloed. Inaugurale rede*. Amsterdam, The Netherlands: Dutch University Press.

Mommaas, H., Heuvel, M. v. d., & Knulst, W. (2000). *De vrijetijdsindustrie in stad en land: Een studie naar de markt van belevenissen*. Den Haag, The Netherlands: Sdu Uitgevers.

Morley, C. (2008, 5 July 2008). *How dynamic is tourism demand?* Paper presented at the 4th International Conference on Tourism, Athens.

Morley, C. (2009). Dynamics in the specification of tourism demand models *Tourism Economics, 15*(1), 23-39.

Motion, J., Leitch, S., & Brodie, R. (2003). Equity in corporate co-branding: The case of Adidas and the All Black. *European Journal of Marketing, 37*(7/8), 1080-1094.

Neuman, W. R. (1991). *The Future of the Mass Audience*. Cambridge, MA: Cambridge University Press.

Nonaka, I., & Takeuchi, H. (1995). *The knowledge creating company*. Oxford, UK: Oxford University Press.

NRIT. (2005a). *Attractieparken in Nederland anno 2005*. Breda, The Netherlands: NRIT.

NRIT. (2005b). *Trendrapport toerisme, recreatie en vrije tijd 2004-2005*. Breda, The Netherlands: NRIT.

NRIT. (2007). *Trendrapport toerisme, recreatie en vrije tijd 2006/2007*. Breda, The Netherlands: NRIT Media.

Nye, R. B. (1981). Eight ways of looking at an amusement park. *Journal of Popular Culture, 15*(1), 63-75.

O'Brien, T. (1995). Growth slows to 1% worldwide; European theme parks up 9%. *Amusement Business, 107*(51), 71-74.

O'Brien, T. (1999). Amusement parks: Worldwide development. *Amusement Business, 111*(27), 15-18.

O'Brien, T. (2000). Amusement parks: Worldwide development. *Amusement Business, 112*(27), 17-20.

Olson, J. C., & Zaltman, G. (2001). Using Projective Methods in ZMET to Elicit Deep Meanings. *Advances in consumer research: Proceedings of the Association for Consumer Research, 28*, 253-253.

Oppermann, M. (2000). Tourism destination loyalty. *Journal of Travel Research, 39*(1), 78-84.

O'Sullivan, E. L., & Spangler, K. J. (1998). *Experience Marketing: Strategies for the New Millennium*. State College, PA: Venture Pub.

Otto, J. E., & Ritchie, J. R. B. (1996). The Service Experience in Tourism. *Tourism Management, 17*(3), 165-174.

Paap, R., & Franses, P. H. (2000). A Dynamic Multinomial Probit Model for Brand Choice with Different Long-Run and Short-Run effects of Marketing-Mix Variables. *Journal of Applied Economics, 15*(6), 717-744.

Pallant, J. (2005). *SPSS Survival Manual*. Berkshire, UK: Open University Press.

Parasuraman, A., Zeithaml, V. A., & Berry, L. L. (1994). Reassessment of Expectations as a Comparison Standard in Measuring Service Quality: Implications for Further Research. *Journal of Marketing, 58*(1), 111-124.

Park, C. W., Jun, S. Y., & Schocker, A. D. (1996). Composite Branding Alliances: An Investigation of Extension and Feedback Effects. *Journal of Marketing Research, 33*(November), 453-466.

Park, K. S., Reisinger, Y., & Kang, H. J. (2008). Visitors' Motivation for Attending the South Beach Wine and Food Festival, Miami Beach, Florida. *Journal of Travel & Tourism Marketing, 25*(2), 161-181.

ParkScout. (2007). *Freizeitparks in Europa*. Koln, Germany: Vista Point Verlag.

ParkScout. (2008). *Freizeitparks in Europa*. Koln, Germany: Vista Point Verlag.

Parry, D., & Johnson, C. (2007). Contextualizing Leisure Research to Encompass Complexity in Lived Leisure Experience: The Need for Creative Analytic Practice. *Leisure Sciences, 29*(2), 119-130.

Pearce, P. L. (1993). Fundamentals of tourist motivation. In D. G. Pearce & R. W. Butler (Eds.), *Tourism Research: Critiques and Challenges* (pp. 113-134). London: Routledge.

Peck, S. (2009). Parkneuheiten 2009. *Kirmis & Park Revue, March 2009*(3), 60-65.

Penseel, H. (2006). *Basisboek entertainment marketing*. Bussum, The Netherlands: Uitgeverij Coutinho.

Petty, R. E., & Cacioppo, J. T. (1986). The Elaboration Likelihood Model of Persuasion. In Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 19, pp. 123-205). New York: Academic Press.

Pikkemaat, B., & Schuckert, M. (2004). *The 'new customer' in the experience economy - Implications for the management of theme parks with an edutainment focus*. Paper presented at the International Conference Leisure Futures.

Pikkemaat, B., & Schuckert, M. (2007). Success factors of theme parks - An exploratory study. *Tourism, 55*(2), 197-208.

Pine, B. J., & Gilmore, J. H. (1998). Welcome to the experience economy. *Harvard Business Review, 63*(July-August), 97-105.

Pine, B. J., & Gilmore, J. H. (1999). *The Experience Economy: Work is Theatre & Every Business a Stage*. Boston: Harvard Business School Press.

Poiesz, T. B. C., & Raaij, W. F. v. (2002). *Synergetische marketing: Een visie op oorzaken en gevolgen van veranderend consumentengedrag*. Amsterdam, The Netherlands: FT Prentice Hall.

Poon, A. (1993). *Tourism, Technology and Competitive Strategies*. Wallingford, CT: CAB.

Price, H. B. (2003). *Walt's Revolution by the Numbers*. Orlando, FL: Ripley Entertainment inc.

PricewaterhouseCoopers. (2004a). European theme park wars: Hotels help refresh park revenues. *Hospitality Directions - Europe Edition, 9*, 1-12.

PricewaterhouseCoopers. (2004b). *Global Entertainment and Media Outlook 2004-2008*. New York: Author.

PricewaterhouseCoopers. (2007). Theme Parks and Amusement Parks. In PricewaterhouseCoopers (Ed.), *Global Entertainment and Media Outlook: 2007-2011* (pp. 608-635).

PricewaterhouseCoopers. (2008). Theme Parks and Amusement Parks. In PricewaterhouseCoopers (Ed.), *Global Entertainment and Media Outlook: 2008-2012* (pp. 575-606). New York: Author.

Quan, S., & Wang, N. (2004). Towards a Structural Model of the Tourist Experience: An Illustration from Food Experiences in Tourism. *Tourism Management, 25*(3), 297-306.

Quintas, P., Lefrere, P., & Jones, G. (1997). Knowledge management: A strategic agenda. *Long Range Planning, 30*(3), 385-391.

Rao, A. R., & Ruekert, R. W. (1994). Brand alliances as signals of product quality. *Sloan Management Review, 36* (Fall), 87-97.

Rao, A. R., & Ruekert, R. W. (1999). Signaling unobservable product quality through a brand ally. *Journal of Marketing Research, 36*(May), 258-268.

Rajaram, K., & Ahmadi, R. (2003). Flow management to optimize retail profits at theme parks. *Operations Research, 51*(2), 175-184.

Ralph, O. (2009). License to Thrill, branded contents for parks and attractions. *ParkWorld, April 2009,* 30-34.

Ren, H. (1998). Economies of culture: Theme parks, museums and capital accumulation in China, Hong Kong and Taiwan. Thesis of Doctor of Philosophy, University of Washington, Seattle, Washington.

Reus, S., Van der Land, S., & Moorman, M. (2008). *Onbewust beïnvloed: Hoe reclame werkt zonder dat je het weet én hoe je het meet* (Vol. 45). Amsterdam, The Netherlands: SWOCC.

Reynolds, T. J., & Gutman, J. (1988). Laddering Theory, Method, Analysis, and Interpretation. *Journal of Advertising Research, 28*(February-March), 11-31.

Richards, B. (1992). *How to Market Tourist Attractions, Festivals & Special Events – a Practical Guide to Maximising Visitor Attendance and Income*. Longman, UK: Harlow.

Richards, W. S., & Richards, G. (1993). Theme parks - UK and international markets. *Tourism Research & Marketing*(11), 3-59.

Richards, W. S., & Richards, G. (1997). Theme parks - UK and international markets. *Tourism Research & Marketing*(8), 17-28.

Richards, S., & Wilkes, K. (2008). Attraction failure and success. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing Visitor Attractions: New Directions* (2nd ed., pp. 39-58). Oxford, UK: Butterworth-Heinemann.

Riezebos, R., Kist, B., & Kootstra, G. (2003). *Brand management: A theoretical and practical approach*. Harlow, UK: Prentice Hall Financial Times.

Ritchie, B. W., Carr, N., & Cooper, C. (2008). School excursion tourism and attraction management. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing visitor attractions: New directions* (2nd ed., pp. 181-196). Oxford, UK: Butterworth-Heinemann.

Ritzer, G. (1993). *The McDonaldization of Society: An Investigation into the Changing Character of Contemporary Social Life*. Newbury Park, CA: Pine Forge Press.

Ritzer, G. (1999). *Enchanting a disenchanted world: Revolutionizing the means of consumption*. Thousand Oaks, CA: Pine Forge Press.

Robillard, Y. (1993). Du jeu au développement économique: Technopoles et parcs thématiques. *Téoros, 12*(3), 39-42.

Roest, H., Pieters, R., & Koelemeijer, K. (1997). Research Notes: Satisfaction With Amusement Parks. *Annals of Tourism Research, 24*(4), 1001-1005.

Rojek, C. (1993). *Ways of Escape: Modern Transformations in Leisure and Travel*. London: Routledge.

Rossmann, D. (2009). *Freizeitparks und strategisches Marketing: Eine Untersuchung zur Positionierung moderner Freizeitparks in der strategische Marketingplanung*. Munchen, Germany: UlysseS Management.

Roth, K. A. (1994). Theme park accounting: What do we really do all winter? *Management Accounting, 75*(8), 48-51.

Rothwell, R. (1992). Successful industrial innovation: Critical factors for the 1990s. *R&D Management, 22*(3), 221-239.

Rouse, J. (2003). The futures market. *Attraction Management, 8 (October)*, 66-73.

Rust, R. T., Ambler, T., Carpenter, G. S., Kumar, V., & Srivastava, R. K. (2004). Measuring marketing productivity: current knowledge and future directions. *Journal of Marketing, 68*(October), 76-89.

Ryan, B. (1992). *Making Capital from Culture*. New York: Walter de Gruyter Inc.

Samuelson, D., & Yegoiants, W. (2001). *The American Amusement Park*. Saint Paul, MN: MBI Publishing.

Sánchez, A. (1998). Le concept de parc à thème. Définition, évolution et perspectives. *Cahier Espaces, 58*, 14-23.

Schenker, H. (2002). Pleasure Gardens, Theme Parks, and the Pituresque. In T. Young & R. Riley (Eds.), *Theme park landscapes: Antecendents and variations*. Washington, DC: Dumbarton Oaks.

Scheurer, R. (2004). Theme park tourist destinations: Creating an experience setting in traditional tourist destinations with staging strategies of theme parks. In K. Weiermair & C. Mathies (Eds.), *The Tourism and Leisure Industry: Shaping the Future* (pp. 227-236). New York: Haworth Hospitality Press.

Schickel, R. (1997). *The Disney Version: The Life, Times, Art, and Commerce of Walt Disney* (3rd ed.). New York: Simon and Schuster.

Schmitt, B. (1999). *Experiential Marketing: How to get Customers to Sense, Feel, Think, Act, and Relate to your Company and Brands*. New York: Free Press.

Schmitt, B. (2003). *Customer experience management: A revolutionary approach to connecting with your customers*. New York: Wiley.

SCP. (2001). *Het nieuwe consumeren: Een vooruitblik vanuit demografie en individualisering*. Den Haag, The Netherlands: Sociaal en Cultureel Planbureau.

SCP. (2004). *In het Zicht van de Toekomst: Sociaal en Cultureel Rapport 2004*. Den Haag, The Netherlands: Sociaal en Cultureel Planbureau.

Sengupta, S., & Bucklin, L. P. (1995). To ally or not to ally? *Marketing Management, 4*(2), 24-32.

SEO. (1995). *Dagtochtenmodel*. Amsterdam: Author.

Simonin, B. L., & Ruth, J. A. (1998). Is a company known by the company it keeps? Assessing the spillover effects of brand alliances on consumer brand attitudes. *Journal of Marketing Research, 35*(February), 30-42.

Song, H., Romilly, P., & Liu, X. (2000). An Empirical Study of Outbound Tourism Demand in the UK. *Applied Economics, 32*(5), 611-624.

Song, H., Witt, S. F., & Jensen, T. C. (2003). Tourism Forecasting: Accuracy of Alternative Econometric Models. *International Journal of Forecasting, 19*(1), 123-141.

Sorkin, M. (1992). *Variations on a theme park: The new American city and the end of public space*. New York: Hill and Wang.

Stappers, J. G., Reijnders, A. D., & Möller, W. A. J. (1990). *De Werking van Massamedia: Een Overzicht van Inzichten*. Amsterdam: Uitgeverij De Arbeiderspers.

Stemerding, M., Oppewal, H., & Timmermans, H. (1999). A Constraints-Induced Model of Park Choice. *Leisure sciences: An interdisciplinary journal, 21*(2), 145-158.

Stevens, T. (2000). The future of visitor attractions. *Travel & Tourism Analyst*(1), 61-85.

Stevens, T. (2003). The future of visitor attractions. In A. Fyall, B. Garrod & A. Leask (Eds.), *Managing Visitor Attractions: New Directions* (pp. p. 284-298). Oxford, UK: Butterworh-Heinemann.

Stewart, D. W. (2009). Marketing Accountability: Linking Marketing Actions to Financial Results. *Journal of Business Research, 62*(6), 636-643.

Stewart, J. B. (2005). *Disney war*. New York: Simon & Schuster.

Sun, L. H., & Uysal, M. (1994). The role of theme parks in tourism. *FIU Hospitality Review, 12*(1), 71-80.

Swarbrooke, J. (2001). Key challenges for visitor attraction managers in the UK. *Journal of Leisure Property, 1*(4), 318-336.

Swarbrooke, J. (2002). *The Development and Management of Visitor Attractions* (2nd ed.). Oxford, UK: Butterworth-Heinemann.

TEA/AECOM (2010). 2009 Theme index: The global attractions index report, available at: *www.themeit.com/etea/2009report.pdf* (Retrieved on 26 April 2010).

TEA/ERA (2007). Attraction Attendance Report 2006, InPark Magazine, available at: *www.themeit.com/attendance_report2006.pdf (Retrieved 5 October 2008).*

TEA/ERA (2008). Attraction Attendance Report 2007, InPark Magazine, available at: *www.themeit.com/attendance_report2007.pdf (Retrieved on 10 May 2009).*

TEA/ERA (2009). Attraction Attendance Report 2008, InPark Magazine, available at: *www.themeit.com/attendance_report2008.pdf (Retrieved on 14 May 2009).*

Thach, S. V., & Axinn, C. N. (1994). Patron assessments of amusement park attributes. *Journal of Travel Research, 32*(3), 51-60.

The Project on Disney. (1995). *Inside the Mouse: Work and Play at Disney World*. Durham, NC: Duke University Press.

Timmerman, T. (2001). *Researching brand images: The nature and activation of brand representations in memory*. Amsterdam: SWOCC.

TRM. (1995). *Theme Parks. UK and International Markets*. London: Tourism Research & Marketing

Tuan, Y. F. (1998). *Escapism*. Baltimore: Johns Hopkins University Press.

Turner, M. (1995). To theme or not to theme. *Splash, 15*(9), 34-38.

Uggla, H. (2004). The brand association base: A conceptual model for strategically leveraging partner brand equity. *Brand Management, 12*(2), 2.

Urry, J. (1990). *The Tourist Gaze: Leisure and Travel in Contemporary Societies*. London: Sage Publications.

Van Assendelft de Coningh, R. (1995). Marketing a theme park: Efteling. *Journal of Vacation Marketing, 1*(2), 190-194.

Van den Putte, B., Cramer, K., & Smit, A. (1999). *In het kielzog van Giep Franzen. SWOCC publicatie nummer 12*. Amsterdam: Stichting Wetenschappelijk Onderzoek Commerciële Communicatie.

Van der Meulen, A., & Lokerman, J. W. (2003). De Efteling van speeltuin tot miljoenenbedrijf. In A. van der Meulen & J. W. Lokerman (Eds.), *Adfo sponsoring cases* (Vol. 15, pp. 1-19): Adfo sponsoring cases.

Van der Peet, T. (2005). *SWOCC Jubileumuitgave*. Amsterdam: Stichting Wetenschappelijk Onderzoek Commerciële Communicatie.

Van Oest, R. D., Van Heerde, H. J., & Dekimpe, M. G. (2010). Return on Roller Coasters: A Model to Guide Investments in Theme Park Attractions. *Marketing Science, 29*(4, July 2010), 721-737.

Vanden Diepstraten, H. (2002). *De Efteling: Kroniek van een Sprookje*. Baarn, The Netherlands: Tirion Uitgevers BV.

Von Stamm, B. (2003). *Managing Innovation, Design & Creativity*. London: John Wiley & Sons.

Voase, R. (2003). Rediscovering the imagination: Meeting the needs of the 'new' visitor. In A. Fyall, B. Garrod & A. Leask (Eds.), *Managing Visitor Attractions: New Directions* (pp. 255-269). Oxford, UK: Butterworh-Heinemann.

Vogel, H. L. (2001). *Travel Industry Economics: A Guide for Financial Analysis*. Cambridge, MA: Cambridge University Press.

Wanhill, S. (2003). Economic aspects of developing theme parks. In A. Fyall, B. Garrod & A. Leask (Eds.), *Managing Visitor Attractions: New Directions* (pp. 39-57). Oxford: Butterworth-Heinemann.

Wanhill, S. (2008b). Economic aspects of developing theme parks. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing Visitor Attractions: New Directions* (2nd ed., pp. 59-79). Oxford, UK: Butterworth-Heinemann.

Wanhill, S. (2008a). Interpreting the development of the visitor attraction product. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing Visitor Attractions: New Directions* (2nd ed., pp. 16-35). Oxford, UK: Butterworth-Heinemann.

Wasburn, J. H., Till, B. D., & Priluck, R. (2000). Co-branding: Brand equity and trial effects. *Journal of Consumer Marketing, 17*(7), 591-604.

Wasko, J. (2001). *Understanding Disney: The Manufacture of Fantasy*. Cambridge, MA: Polity.

Wasko, J., Phillips, M., & Meehan, E. R. (2001). *Dazzled by Disney? The global Disney audiences project*. London: Leicester University Press.

Watson, S., & McCracken, M. (2008). Managing human resources in visitor attractions. In A. Fyall, B. Garrod, A. Leask & S. Wanhill (Eds.), *Managing visitor attractions: New directions* (2nd ed., pp. 264-280). Oxford, UK: Butterworth-Heinemann.

Weaver, P. A., McCleary, K. W., Han, J., & Blosser, P. E. (2009). Identifying leisure travel market segments based on preference for novelty. *Journal of Travel & Tourism Marketing, 26*(2-3), 568-584.

Weinstein, R. M. (1992). Disneyland and Coney Island: Reflections on the evolution of the modern amusement park. *Journal of Popular Culture, 26*(1), 131-164.

Wiering, C. (2008). De Efteling: Pretpark en TV-producent. *Tijdschrift voor marketing, april 2008,* 40-42.

WilkofskyGruenAssociates. (2003). *Entertainment and media outlook for France, Germany, Italy, the Netherlands, Spain and the United Kingdom*. New York: Author.

Witt, S. F., & Witt, C. A. (1992). *Modelling and Forecasting Demand in Tourism*. London: Academic Press Limited.

Witt, S. F., & Witt, C. A. (1995). Forecasting Tourism Demand: a Review of Empirical Research. *International Journal of Forecasting, 11* (3), 447-475.

Wolf, M. J. (1999). *The entertainment economy: How mega-media forces are transforming our lives*. London: Penguin Books.

Wong, K. K. F., & Cheung, P. W. Y. (1999). Strategic theming in theme park marketing. *Journal of Vacation Marketing, 5*(4), 319-332.

Wu, D., & Liu, N.-P. (2007). Why do amusement parks only charge a fixed admission fee? *Economic Letters, 95,* 180-185.

Yip, P. (2005). Basic concepts of Co-branding, with examples from the hospitality. *The Canadian Lodging Outlook*. Vancouver: HVS International.

Young, J. A., Hoggatt, C. D., & Paswan, A. K. (2001). Food service franchisors and their co-branding methods. *Journal of Product & Brand Management, 10*(4), 218-227.

Young, T. (2002). Grounding the Myth - Theme Park Landscapes in an Era of Commerce and Nationalism. In T. Young & R. Riley (Eds.), *Theme Park Landscapes: Antecedents and variations* (pp. 1-10). Washington, DC: Dumbarton Oaks.

Young, T., & Riley, R. (2002). *Theme park landscapes: Antecedents and variations*. Washington, D.C.: Dumbarton Oaks.

Young, A. F., & Young, R. (2008). Measuring the Effects of Film and Television on Tourism to Screen Locations: A Theoretical and Empirical Perspective. *Journal of Travel & Tourism Marketing, 24*(2-3), 195-212.

Zaltman, G. (1996). Metaphorically speaking. *Marketing Research, 8*(2), 13-20.

Zaltman, G. (1997). Rethinking market research: Putting people back in. *Journal of Marketing Research, 34*(4), 424-437.

Zaltman, G. (2000). Consumer researchers: Take a hike! *Journal of Consumer Research, 26*(4), 423-428.

Zaltman, G. (2003). *How Customers Think: Essential Insights into the Mind of the Market*. Boston: Harvard Business School Press.

Zaltman, G., & Coulter, R. H. (1995). Seeing the voice of the customer: Metaphor-based advertising research. *Journal of Advertising Research, 35*(4), 35-51.

Zeithaml, V. A., Bitner, M. J., & Gremler, D. D. (2009). *Services Marketing: Integrating Customer Focus Across the Firm* (5th ed.). Boston: McGraw-Hill/Irwin.

Zukin, S. (1991). *Landscapes of power: From Detroit to Disney World*. Berkeley: University of California Press.

Zukin, S. (1995). Learning from Disney World. In *The Cultures of Cities* (pp. 48-77). Cambridge, MA, Massachusetts: Blackwell.

Appendix A *Informant demographics*

ID #	Age	Gender	Family	Recent visit	Region	Year
1	21	M	Single	< 3 years	South	2005
2	27	M	Married	> 6 years	West	2005
3	33	F	2 kids	> 3 years	West	2005
4	23	F	Single	< 3 years	South	2005
5	37	M	3 kids	> 3 years	Mid	2005
6	43	F	2 kids	> 3 years	North	2005
7	41	M	1 kid	> 3 years	North	2005
8	35	F	2 kids	< 3 years	South	2005
9	38	F	Single	> 6 years	South	2005
10	29	F	1 kid	> 3 years	Mid	2005
11	57	M	3 kids > 12	> 3 years	West	2005
12	30	M	1 kid	> 3 years	South	2005
13	48	F	2 kids > 12	> 6 years	North	2005
14	17	M	Single	< 3 years	West	2005
15	48	F	3 kids > 12	< 3 years	Mid	2005
16	36	F	4 kids	< 3 years	South	2008
17	42	M	2 kids	< 3 years	South	2008
18	20	F	Single	> 3 years	Mid	2008
19	27	M	2 kids	< 3 years	Mid	2008
20	40	M	1 kid > 12	> 3 years	Mid	2008
21	18	F	Single	> 6 years	North	2008
22	32	F	2 kids	< 3 years	West	2008
23	34	F	1 kid	> 6 years	West	2008

Appendix B *Inventory of brand representation attributes*

1	Product characteristics	
1	product indication	class, type, variations
2	product physique	shape, color, smell, tactual, sound, taste, ingredients/ composition, product history

2	Product usage	
1	product usage	usage, procedures, operations, application, serviceability
2	moment of usage	season, time, day/week/weekend
3	social usage environment	
4	extrinsic physical situation	outdoor, indoor, location
5	intrinsic physical situation	condition, physical needs
6	usage purpose & effects	
7	functional (dis)advantages	
8	product user imagery	age, character, appearance, status, gender, life-style

3	Brand identifiers	
1	brand name	informant, metaphoric meaning, sound
2	brand mark/logo	colour, shape, typography
3	product packaging	shape, colour, material, variations, style

4	Price/Quality	
1	generic product quality	
2	branded product quality	
3	generic product price	
4	branded product price	
5	branded product price/quality ratio	

5	Brand personification	
1	brand personality	age, character, appearance, status, gender, life-style
2	values	
3	brand ideology	
4	consumer-brand relationship	partner quality, affection, intimacy, self concept connection, nostalgia, personal commitment, passionate attachment
5	affection	positive versus negative affect, low versus high intensity
6	self image: impressive function	
7	self image: expressive function	
8	brand user image	

6	Market	
1	competition	leader/follower, market pressure
2	uniqueness	
3	topicality/ contemporarity	
4	availability	outlet/ store/ establishment
5	market orientation	local/ global

7	Organization	
1	geographic origin	country, region, location
2	organization characteristics	history, founders/personalities, culture, reputation, consumer relation, media exposure, real estate
3	organization ability	overall success, service, competence, innovativeness, expertise, brand-product relation
4	organization social responsibility	vision, ideology
5	organization alliances	

8	Advertising	
1	campaign	style, media type, time, content
2	pay-off/ slogan	
3	endorsement	celebrity, expert, stereotype personality, character
4	promotional actions/gadgets	
5	sponsoring	
6	advertising attitude	

9	Attitude and Purchase behaviour
1	past product purchase behaviour
2	past brand purchase behaviour
3	overall product attitude
4	overall brand attitude
5	social norms towards the product
6	social norms towards the brand
7	product purchase potential
8	brand purchase potential
9	product purchase intention
10	brand purchase intention
11	brand preference/ disapproval

10	Personal reference	
1	social group reference	participation-, automation-, anticipatory- and negative group reference
2	self reference	personal experience, course of life, moments of experience
3	informational sources	consumer reports, media

Timmerman (2001), with permission SWOCC

Appendix C *Definition of theming indicators*

Theming indicator	Definition
Name & signage	The name of the attraction and all signage relating to the attraction are consistent with the attraction's theme.
Landscaping	The surroundings of the attraction is landscaped in accordance with the attraction's theme.
Entrance & external architecture	The entrance of the attraction as well as the outside of the attraction's buildings (including station building and / or show building), as far as it is observable from guest areas, is themed in accordance with the attraction's theme.
Queue & internal architecture	The queue line and the inside architecture of the attraction (excluding the ride itself) are themed in accordance with the attraction's theme.
Ride / transport system	The attraction itself is themed in accordance with the attraction's theme. The attraction's transport system is themed in accordance with the attraction's theme.
Staff members	The attraction's staff members are themed (through uniforms / costumes or other methods) in accordance with the attraction's theme.
Live entertainment	Within the attraction or the attraction's queue line, live entertainment is used to further develop the attraction's theme.
Sound / music	Within the attraction or the attraction's queue line, sound and / or music is used which is in accordance with the attraction's theme.
Ambient conditions	Ambient conditions include background characteristics of the environment such as temperature, lighting, noise, music, scent and color. The attraction's ambient conditions are in accordance with the attraction's theme.
Food & Beverage/ merchandise locations	Food & beverage and / or merchandise locations in the near vicinity of the attraction are used to further develop and sustain the attraction's theme.

Appendix D *Examples of theming categories*

Theming categorie	Attraction	Park
1	Pirates of the Caribbean	Disneyland Paris
2	Poseidon	EuropaPark
3	Sea Odyssey	PortAventura
4	Droomvlucht	Efteling
5	Charlie and the chocolate factory	Alton Towers
6	Tonnere de Zeus	Parc Asterix
7	Reset	Legoland Windsor
8	The Demon	Tivoli Gardens
9	Fairy Tale Castle	Gardaland
10	Tornado	Bakken
11	Uppskjutet	Liseberg

Appendix E *Results error correction model (theming)*

To make the tables easier to compare with one another not all specific variables per park are added to the tables. Only those variables that can be found in all analyses are added and those variables that have a strong impact on the results.

'Results small Theme Park'	Short run effect					Long run effect				
Effect (variable)	Parameter estimate [a]		Stand. error	M/E [b]	Short run effect on GNV	Parameter estimate [a]		Stand. error	M/E [b]	Long run effect on GNV [c]
Adjustment parameter (lnGNV_t_1)						-0.422	***	0.018		
New attraction effect	-0.244		0.207	M		0.041	*	0.024	M	1.102
Retheming interaction effect	-0.337		0.337	M		-0.110	***	0.029	M	0.770
Real regular admission price effect	-4.867	***	1.485	E	-4.867%	-0.481	***	0.063	E	-1.139%
Vacation period days effect	0.244	***	0.048	M	1.276	0.067	**	0.021	M	1.172
Weekend days effect	0.403	***	0.021	M	1.496	0.030		0.024	M	
National holiday effect	0.502	***	0.039	M	1.652	0.266	***	0.052	M	1.878
Opening hours effect	1.686	***	0.114	E	1.686%	0.562	***	0.078	E	1.331%
Temperature effect	0.116	**	0.042	E	0.116%	0.126	***	0.026	E	0.298%
Precipitation effect	-0.006	***	0.001	E	-0.006%	-0.007	***	0.001	E	-0.016%
New show effect	-0.173		0.204	M		0.035		0.024	M	
Halloween effect	0.244	***	0.056	M	1.238	0.110	**	0.053	M	1.297

[a] ** = p<0.10 (two-sided test); ** = p<0.05 (two-sided test); *** = p<0.01 (two-sided test)*
[b] *M = multiplier effect of change in dummy variable; E = elasticity effect of change in ratio variable*
[c] *Long run effect on GNV if permanent change in variable; Cumulative long run effect on GNV if temporary change in variable*
NOTES: N = 1850, R^2_{adj} = 0.646, F = 136.163, df = 25
Calculating long term multiplier: exp (parameter estimate/ - adjustment parameter); long term elasticity: parameter estimate/ - adjustment parameter; short term multiplier: exp (parameter estimate); short term elasticity: parameter estimate.
The short-term effects were calculated using the so-called 90% duration time calculation; ln (1-0.9) / ln (1 + adjustment parameter). The 90% duration time for Park D was, according to this calculation method, 4.2 days

New attraction effect: 10.2%

'Results small Amusement Park'	Short run effect					Long run effect				
Effect (variable)	Parameter estimate [a]		Stand. error	M/E [b]	Short run effect on GNV	Parameter estimate [a]		Stand. error	M/E [b]	Long run effect on GNV [C]
Adjustment parameter (lnGNV_t_1)						-0.820	***	0.076		
New attraction effect	0.092		0.058	M		0.090	**	0.044	M	1.116
Retheming interaction effect				M					M	
Real regular admission price effect	0.125		0.478	E		-0.377	*	0.203	E	-0.459%
Vacation period days effect	0.442	***	0.054	M	1.556	0.524	***	0.073	M	1.895
Weekend days effect	0.305	***	0.014	M	1.357	0.293	***	0.017	M	1.429
National holiday effect	0.025		0.026	M		-0.104	***	0.036	M	0.880
Opening hours effect	0.888	***	0.085	E	0.888%	0.775	***	0.103	E	0.945%
Temperature effect	0.421	***	0.114	E	0.421%	-0.015		0.124	E	
Precipitation effect	-0.058	***	0.017	E	-0.058%	-0.055	***	0.022	E	-0.067%
New show effect				M					M	
Trend effect	0.308		0.291	E		0.147	***	0.035	E	0.179%

*[a] * = p<0.10 (two-sided test); ** = p<0.05 (two-sided test); *** = p<0.01 (two-sided test)*
[b] M = multiplier effect of change in dummy variable; E = elasticity effect of change in ratio variable
[c] Long run effect on GNV if permanent change in variable; Cumulative long run effect on GNV if temporary change in variable
NOTES: N = 172 (weekly), R^2_{adj} = 0.805, F = 32.025 df = 19

New attraction effect: 11.6%

'Results large Theme Park'	Short run effect					Long run effect				
Effect (variable)	Parameter estimate [a]		Stand. error	M/E [b]	Short run effect on GNV	Parameter estimate [a]		Stand. error	M/E [b]	Long run effect on GNV [c]
Adjustment parameter (lnGNV_t_1)						-0.328	***	0.010		
New attraction effect	0.632	***	0.112	M	1.880	0.023	*	0.012	M	1.072
Retheming interaction effect				M					M	
Real regular admission price effect	-4.959	***	0.792	E	-4.959%	0.075	**	0.037	E	0.229%
Vacation period days effect	0.122	***	0.031	M	1.130	0.125	**	0.013	M	1.464
Weekend days effect	0.350	***	0.012	M	1.419	0.156	***	0.014	M	1.609
National holiday effect	0.438	***	0.022	M	1.549	0.358	***	0.029	M	2.978
Opening hours effect	1.039	***	0.084	E	2.826%	0.197	***	0.053	E	0.600%
Temperature effect	0.314	***	0.029	E	0.314%	0.255	***	0.020	E	0.777%
Precipitation effect	-0.032	***	0.009	E	-0.032%	-0.038	***	0.011	E	-0.116%
New show effect				M					M	
Winter season effect	-0.700	***	0.147	M	0.497	0.199	***	0.044	M	1.834

*[a] * = p<0.10 (two-sided test); ** = p<0.05 (two-sided test); *** = p<0.01 (two-sided test)*
[b] M = multiplier effect of change in dummy variable; E = elasticity effect of change in ratio variable
[c] Long run effect on GNV if permanent change in variable; Cumulative long run effect on GNV if temporary change in variable
NOTES: N = 4956 (weekly), R^2_{adj} = 0.410, F = 138.067 df = 25

New attraction effect: 7.2%

'Results large Amusement Park'	Short run effect					Long run effect				
Effect (variable)	Parameter estimate [a]		Stand. error	M/E [b]	Short run effect on GNV	Parameter estimate [a]		Stand. error	M/E [b]	Long run effect on GNV [c]
Adjustment parameter (lnGNV_t_1)						-0.432	***	0.025		
New attraction effect	-0.009		0.163	M		0.049	**	0.020	M	1.120
Retheming interaction effect	-0.255		0.165	M		-0.010		0.019	M	
Real regular admission price effect	0.345		0.224	E		-0.114	*	0.063	E	-0.263%
Vacation period days effect	-0.012		0.088	M		0.069	***	0.023	M	1.173
Weekend days effect	0.162	***	0.027	M	1.496	-0.144	***	0.035	M	0.716
National holiday effect	0.273	***	0.058	M	1.319	0.099		0.076	M	
Opening hours effect	2.007	***	0.208	E	2.007%	0.861	***	0.164	E	1.993%
Temperature effect	-0.018		0.013	E		-0.048	***	0.011	E	-0.111%
Precipitation effect	-0.141	***	0.019	E	-0.141%	-0.074	***	0.021	E	-0.171%
New show effect				M					M	
Halloween effect	0.183	***	0.138	M		0.255	***	0.066	M	1.804

*[a] * = p<0.10 (two-sided test); ** = p<0.05 (two-sided test); *** = p<0.01 (two-sided test)*
[b] M = multiplier effect of change in dummy variable; E = elasticity effect of change in ratio variable
[c] Long run effect on GNV if permanent change in variable; Cumulative long run effect on GNV if temporary change in variable
NOTES: N = 1453 (daily), R^2_{adj} = 0.470, F = 62.239 df = 21

New attraction effect: 12.0%

English summary

Chapter 1

Attraction accountability is an important topic for the theme park industry. The amount of money spent on new attractions appears to increase annually and research into the effects of these investments is sparse. Every year, hundreds of millions are invested in the theme park industry in Europe and banks are seriously reserved to finance the risks. At present, developing new attractions usually takes place based on subjective, intuitive and often random presuppositions about the possible responses from visitors. Research into the effects of attractions remains therefore insufficient and fragmentary by nature, which will not provide adequate results in the long-term. Without a systematic approach, experience marketing can only be left in the hands of creative and intuitive designers and managers who, though talented and well-intended, may not see the customer experience in its entirety and complexity. This statement may outrage some theme park managers and imagineers who claim their new attractions 'work'. They mean they have detected, even measured, the appreciation of the new attraction. 'Kids like it, last week the waiting time for this new attraction was more than two hours and 90% of the visitors want to do the ride again'. From such effects, which are genuine and valuable, they claim their new attractions are 'effective': this can be a weasel word, sliding easily into 'worth it'. I believe that in the past 30 years, the theme park industry has developed amazingly wonderful attractions that have doubtless contributed to the growth of the industry, but the degree to which they have contributed is still unknown today. With an increasing call for accountability I believe the theme park industry will not be able to avoid 'establishing a relation between a certain effort and a certain effect, such that one can justify the effect up front and verify the effect afterwards'. Although it is hard, and maybe even impossible in the creative industries, we should at least give it a try to find relevant and useful relations between theme park investment efforts and –outcomes. Therefore, the central question of this dissertation is 'what is the impact of new attractions on the performance of European theme parks and how may this effect be explained? In this dissertation three questions have been answered:

1. What is the relative and perceived importance of investing in new attractions?
2. What are the effects of investing in new attractions?
3. How can the effects of investments in new attractions be explained?

To get the most accurate idea of the influence of new attractions, I used triangulation of research methods and perspectives. The dissertation consists of a collection of five articles on aspects of the same topic connected by an introductory and concluding chapter. Two articles deal about the impact of new attractions, one from a management perspective and the other from an econometric perspective, and the other three articles deal about finding an explanation for the impact found in the former articles.

Chapter 2

In chapter two I discussed the (social) origin of theme parks, the importance of investing in new attractions and the trends that can be found in the theme park industry. Beyond their present role as pure cultural manifestations of commercial leisure and despite the consideration by some in intellectual discourses – with no empirical foundation, however – that they are 'second class leisure facilities' due to their mass, artificial and consumerist nature, theme parks are a cultural creation. Capital expenditure for European theme and amusement parks is estimated to equate to around 9 percent of industry revenues, a total of €391 million, of which €372 million is estimated to have been spent within Europe.

The lowest percentage is 7% in France and the highest 15% in Sweden. However, figures can fluctuate rather sharply from one year to another depending on a few individual expenditures. Since starting my PhD research in January 2008, no less than 501 new attractions have opened in 158 different parks in Europe. Although the top 100 parks in Europe are responsible for more than 83% of all visitors, in the past three years they have opened only 55.7% of all the new attractions. Of the top 100 parks in Europe, in the past three years 79 have invested in one or more new attractions. The same numbers (79) of the other parks have done the same. This means that an average of 58.3% of all European parks have invested in new attractions in the past three years, but there are wide differences in the size of the parks: (1) in absolute and relative terms, in the past three years more smaller parks have not invested in a new attraction and (2) the smaller parks that have invested in new attractions have, in absolute and relative terms, invested in fewer attractions than the top 100 parks have done.

Chapter 3

In the third chapter the impact of new attractions for European theme parks is presented from a management perspective. All in all it can be argued that managers of theme parks attach great importance to investing in new attractions. It is considered to be the most influential factor for the visitor numbers on the long term and as the second most influential factor for the visitor numbers on the short term. Should we exclusively look at the manageable factors, then investing in new attractions is viewed as the most important factor in both cases. Investing or not investing in new attractions is thus, both tactically as well as strategically, a very important policy issue. The modal frequency a major investment is once every three years, combined with a yearly minor investment. The average effect of the last major investment in a new attraction in this research amounts to 7.5% for the first year. The lowest score was 0%, the highest score amounted to 20%. Only 20% of the parks spontaneously indicated that an effect could also be expected in the second year. Aided this percentage increased to more than 50% of the participating parks, in which the average effect was to halve the effect demonstrated in the first year; namely a small 4%. If parks had not invested in the year that they made their last major investment in a new attraction then, according to their own expectations, they would have had an average of 5% less visitors.

Chapter 4

In chapter 4 results are presented from an econometric study among four different theme parks in Europe, each with a different social origin. Three of these theme parks are located in northern Europe; the fourth theme park is located in southern Europe. All four participating theme parks have an annual attendance of over one million (but not exceeding four million). One of the theme parks can be defined as a resort-type theme park; the other three can be described as regional theme parks. Data from two of the participating theme parks was processed on a daily level; data from the other two participating theme parks was processed on a weekly level, because certain important characteristics for these latter two theme parks could not be obtained on a daily level. An error correction model was used for modelling, which has the advantage that it is a dynamic model. We therefore can make a distinction between short term effects and long term effects. The econometric model's outcomes lead to two important conclusions regarding the identified effects of new attractions on attendance. The impact of adding a new attraction to the number of visitors to the theme park in detailed described in chapter 4 was 10.2% and lasted for two years. The impact in the second year was more or less half the effect of the first year; after this period, the effects were no longer significant. However, large differences were found within this park. The weakest attraction only added 2% to the attendance levels, whereas the strongest new attraction added 23% in the first year (and another 12% in the second year). Both new

attractions where defined as major investments (by their own management). This could be seen as the difference between success and failure, profit and loss. An explanation should be found.

Chapter 5

The question that is answered in chapter 5, is whether or not it is possible to transform the a posteriori knowledge of the impact of new attractions into a priori knowledge. In other words: to what extent can analysis of the relationship between investment and attendance be used to determine the effect of a new attraction on attendance before – and not after – it is built? To answer this question, an insight into the underlying causes of attendance growth needed to be gained. What if we found that a dark ride in a certain theme park has had a larger effect on attendance than a 3D/4D show; what does that mean? The difference in the eventual (behavioural) response is obvious: the dark ride caused more attendance than the 3D/4D show. However, what is yet unknown, is the cause of this response. One might hypothesise that the cause lies within the story the dark ride is based on, the theming of the attraction or the attractiveness of the stimuli that the dark ride offers park guests. An explanation may be found in sensory perception, in the evocation of pleasant as well as relevant emotions or perhaps even in a cognitive response regarding the recognition of pleasant memories of the past. It is not until we better understand which stimulus and related intermediary response are responsible for the final behavioural response, that we increase our chances of success in forecasting the performance of new attractions. Chapter 5 proposes the Attraction Response Matrix (ARM) as a tool to gain an improved insight into and map these stimuli and intermediary responses. The basic assumption of this ARM is *'in situation A, attraction B will most likely have effect C (on target audience D)'*. In this ARM, situation variables (A) and attraction characteristics (B) are distinguished as stimuli on the one hand and four levels of possible effects (C) (attraction response, park response, brand response and economic response), on a certain target audience (D) are distinguished as responses or output on the other hand. The division in effect levels was constructed based on the results of a Zaltman Metaphor Elicitation Technique (ZMET) study performed at one of the participating parks. In order to determine the effect of a new attraction, one must first examine the situational variables (A) and the attraction characteristics (B) on the one hand, and then investigate to which effects (C) certain specific constellations of situations and attraction characteristics will lead, and how these effects will mutually relate (for each target group). So if a new attraction was added to the park we should do an econometric study to find out what the real impact of this attraction is on the attendance level, compare it with all other attractions that were added in the past, and then find an explanation by looking at the individual responses, in relation to the characteristics of the attraction. In this way we might find that the 23%-attraction makes a better fit to the brand, than the 2%-attraction does. We then still must be careful in interpreting these results, but if we use this insight to look at all other attractions and their results, we are better able to understand the large differences between these attractions and (maybe) we can make better predicaments for the future. By using the Attraction Response Matrix as a guiding instrument we could work in a systematic and integrative way. We might still not find all the reasons for success or failure of new attractions, because of the 'intangible magic', but at least we can lessen the uncertainty and eliminate wrong and spurious conclusion.

Chapter 6

In chapter 6 a classical experiment concerning a co-branding strategy between de Efteling and WWF is presented in an attempt to find an explanation for the differences in the height and duration of effects of new attractions. Co-branding is a very often used strategy in the theme park industry. All theme parks have (official) partners with whom they collaborate in one way or another. Many parks

even build rides and attractions together with their co-brand partners. The benefits are clear and are mentioned in many academic articles about co-branding. However, theme parks should also be aware of the dangers of co-branding. Pairing with a wrong partner can seriously damage the brand; negative spill over effects, erosion, brand dilution and even negative bottom line effects for the participating brands are possible. Through this field experiment an insight has been given into the possible effects a respondent's perceived brand fit within a co-branding situation can have on the average evaluation of core associations of one of the constituent brands. Not only does this experiment show that an ill-considered choice for a co-brand partner can influence the brand associations, it can even influence the core associations of a brand. While core associations are the first associations that come to mind when one is confronted with a brand (signal), they are used to position the brand in the mind of the consumer. This study shows that the average evaluation of the core associations decreased by the negative brand fit, and thus the positioning of the brand has been changed in a negative way. The brand was harmed by the co-branding strategy. Another interesting finding is that the brand fit manipulation has resulted in a more negative image of Efteling without affecting the evaluation of the 3D/4D-attraction as such. Both the control and experimental group liked the PandaVision-experience, although the experimental group was told that the PandaVision-experience would pull them out of the enchanting contra structure. Respondents have processed the information and reasoning given to them intensively, but this did not weaken their experience of the attraction. It is important to note that the average evaluation of an attraction as such does not guarantee success. PandaVision is evaluated very positively but can still have a negative effect on the brand Efteling if the brand fit is considered to be poor. In the long run it is not about adding a new attraction to your theme park, but having people love your park and brand. A new (co-branded) attraction is just a mean to this end.

Chapter 7

The goal of the research presented in chapter 7 was to determine the impact of theming an attraction. For this reason the historical data of four (Northern) European amusement- and theme parks were investigated by use of the error correction model. A total of 36 new attractions at these four parks have been investigated to find out the impact of theming on the number of visitors. The choice of the participating parks was based on the distinction between amusement parks and theme parks on the one hand and large versus small parks on the other hand. From each group one park participated in this research, which means one large amusement park, one large theme park, one small amusement park and one small theme park. Eleven different, mutual exclusive categories of theming were distinguished, based on the degree of theming (no theming, decoration, macro theming and micro theming) combined with three other relevant theming aspects (distraction, secondary layer of meaning and use of storytelling). Finally it was determined to what kind of processing effects these eleven theming categories led, because people process (different kinds of) theming in different ways. The theming processing model presented in chapter 7 is based on the assumption that three necessary conditions should be met, before consumers process theming in an elaborated way, namely Motivation, Ability and Opportunity. The effects per attraction were measured, with the error correction model explained in chapter 4, and afterwards the results were recoded into categories of (effects of) theming. The overall mean effect on number of attendance of all 36 new attractions of the four participating parks was 10% growth in the first year and another 5.3% in the second year. After the second year no significant effects were found anymore. However, (big) differences were noticeable between the parks as well as between the attractions. Theme parks had in general lower scores (8.5%) than amusement parks (11.8%) and the large theme park (7.2%) was doing worse than the smaller theme park (10.2%). The reason for this is not known, but it is believed that this has mainly to do with contextual factors. If

we have a look at the effects of the five levels of (processing) effects then we see big differences (too). Attractions that lead to immersion, enchantment and transformation of identity and lifestyle had the highest effect on the attendance level, namely 14.0% in year 1 (and another 10.1% in year 2). Smaller effects were seen for the attractions that lead to immersion and enchantment, but do not lead to transformation of identity and lifestyle. These attractions had a mean of 11.5% extra visitors in the first year (and another 7.3% in the second year). Differences have been found though between theme parks and amusement parks on the one hand and large and small parks on the other hand.

Chapter 8

The research in this dissertation confirmed the thoughts that it is impossible to predict the success of investments in the cultural industries. In an industry where novelty and creativity play a large role in the expectations and satisfaction of visitors, it is not possible to guarantee success. If this were possible, the results of investment in the past would show a much more limited spread. However, the results that were found show greater differences than similarities among the participating parks and attractions. Although it is impossible to predict the effect of new attractions, the study did establish an approach to the question of investing. This was applied to the attraction park market, but the same research method can be applied to water parks, museums, zoos, city centres, cultural centres, etc. After all, these parties all have to deal with the same – or at least similar – investment issues. The error correction model is a relatively simple model to establish the short-term and long-term effects of past investments. These effects can be calculated as an average for the whole park or by separate investments, giving a good insight into the effectiveness of individual investments. By studying the separate results more closely using the Attraction Response Matrix, insight can be gained into the underlying explanation of the results. If we go to work as described above, establishing and studying the situational variables minutely, we may even be able, in a limited way, to generalise about comparable situations. Because truly novel attractions are no basis for generalisation, this means that such reasoning cannot be applied in a 'copy and paste' manner to this type of attractions, but only for 'similar attractions in similar situations'. It is worthwhile to continue further research into the most suitable model to determine the effects of new investments in attraction parks. I remain convinced that we will not be able in this way to make predictions about the effectiveness of a new attraction, but that we can more accurately trace the precise effect of past investments in order to (for instance) use the Attraction Response Matrix to find an explanation for the effect that is identified. And by this means we can increase the chance for a successful investment in future. Creating the right organisational culture is far and away the most important thing an organisation can do to increase its chances for successful innovations, and to achieve the right culture, strong leadership is required. Inspiring leaders tolerate risk and are open to step-wise changes rather than incremental ones. These leaders create the right kind of company culture – a culture of experimentation in which mistakes are accepted as part of the process. Making mistakes is seen as an accelerated learning process and an inspiring leader will encourage this. The final aspect I discussed in chapter 8 is the importance of a knowledge-creating organisation. In our industry, perhaps more than in others, we have career patterns where it is possible to go from concessions vendor to director. This means that it is important to recognise the management of tacit knowledge (knowledge connected to the individual who possesses it). In the course of the years, such an individual accumulates an enormous quantity of knowledge that is by nature personal and therefore difficult to articulate and manage. A knowledge-creating company has the ability to tap into this tacit knowledge. A body of knowledge is also needed for creativity, because creativity is relating a concept to a particular body of knowledge. The existing body of knowledge is as vital as the novel idea. It is difficult to predict the success of investments in our industry, but on the other hand outcomes are not completely random

either. We must beat the average – and if we have good people at all levels, who are prepared to share their knowledge, take calculated risks and display trust in each other and in the process, we can do it.

Nederlandse vertaling laatste hoofdstuk

"Guessing is dysfunctional. Ignoring prior experience is denial. Using valid numbers to project performance is rational." - Harrison "Buzz" Price

Aan het eind van dit proefschrift wordt het tijd de balans op te maken van alle onderzoeken, publicaties, presentaties, discussies, gesprekken, gedachtes, overtuigingen en twijfels van de afgelopen jaren. Ik doe dit allereerst vanuit mijn eigen perspectief als PhDcandidate, om daarna vanuit het perspectief van de branche een reactie op het onderzoek te geven. Ik sluit dit hoofdstuk af met enkele aanbevelingen.

De visie van de PhD candidate

Als PhD kandidaat ben ik van mening dat het onderzoek in dit proefschrift op diverse punten van waarde is voor de wetenschap, alsook dat het een zekere maatschappelijke relevantie heeft. Onderstaand zal ik dat op de belangrijkste punten uitwerken.

Het grote belang van investeren in nieuwe attracties

Parken in Europa geven aan dat investeren in nieuwe attracties veruit de belangrijkste beheersbare factor is met betrekking tot bezoekersaantallen, zowel op de korte als op de lange termijn (hoofdstuk 3). Volgens ERA/AECOM (2009) bedraagt de capital expenditure (capex) van Europese parken gemiddeld ongeveer 9% van de jaarlijkse omzet, hetgeen neerkomt op een Europees totaalbedrag van circa €370 miljoen. In de afgelopen drie jaar zijn in de Europese attractieparken in totaal 501 nieuwe attracties toegevoegd (hoofdstuk 2). Omdat de capex niet volledig aan attracties wordt besteed is het onduidelijk wat het gemiddelde bedrag is dat in nieuwe attracties wordt geïnvesteerd, maar het is aannemelijk dat het bedrag in elk geval in de zes nullen loopt. De modale frequentie van investeren is eens in de drie jaar een major investment en jaarlijks een minor investment (hoofdstuk 3). Een kleine 40% van alle Europese parken hanteert deze investeringsfrequentie. 30% investeert minder frequent, de overige 30% investeert met een hogere frequentie. Grosso modo komt dit neer op een driejaarlijkse major investering van een slordige 20% van de omzet, aangevuld met een minor investering van een kleine 5% in de overbruggende twee jaren. Achter al deze gemiddelden gaan echter grote verschillen schuil. Zo zijn er parken die nauwelijks enkele procenten aan een major investment besteden terwijl er ook parken zijn die hier circa 75% van hun omzet aan besteden. Een en ander is onder meer afhankelijk van de ontwikkeling- en onderhoudsfase waarin het betreffende park zich bevindt, de concurrentiepositie, de strategische koers die het park gekozen heeft, het economische tij en tal van andere factoren, zoals bijvoorbeeld de opvatting van het management over het belang van investeren. Daar waar voormalig directievoorzitter van de Efteling Ronald van der Zijl bij zijn afscheid in 2008 nog aangaf dat de Efteling in de toekomst slechts eens in de zeven jaren zou investeren in grote nieuwe attracties heeft zijn opvolger Bart de Boer juist gekozen voor een inhaalslag die op dit moment gekenmerkt wordt door een jaarlijkse major investering. Sinds het aantreden van de Boer heeft het park voor een slordige €100 miljoen aan investeringsplannen bekend gemaakt. Het (financiële) belang dat aan nieuwe attracties wordt gehecht verschilt dus niet alleen per land en park, maar ook nog eens per leider die in de driver seat zit. Branchebreed beschouwd kan echter gesteld worden dat de hoogte en frequentie van investeren een van de belangrijkste aandachtspunten van het parkmanagement is. Het gemiddelde effect van niet-investeren wordt door het Europese parkmanagement geschat op een gemiddelde afname in bezoekersaantallen van circa 5%, het gemiddelde effect van wel-investeren op een toename van 7.5% in het eerste jaar en nog eens een slordige 3.5-4% in het tweede jaar.

Het voorspellen van het onvoorspelbare...

Naast de bovenstaande bevindingen heeft het onderzoek een bevestiging opgeleverd van de gedachtes die onder meer door Hesmondhalgh (2007) al eerder zijn geuit dat het onmogelijk is om het succes van investeringen in de cultural industries te voorspellen. Hoewel Hesmondhalgh de theme park industrie niet als een expliciet voorbeeld van de cultural industries heeft omschreven is uit de analyses wel duidelijk geworden dat het voorspellen van het effect van nieuwe investeringen in deze industrie eveneens onmogelijk is. In een branche waar vernieuwing en creativiteit een grote rol spelen in de verwachting en gasttevredenheid van bezoekers is het niet mogelijk om successen te garanderen. Zou dit wel mogelijk zijn dan zouden de resultaten van investeringen in het verleden een veel geringere spreiding te zien moeten geven. De gevonden resultaten laten echter grotere verschillen dan overeenkomsten zien tussen de deelnemende parken en attracties. De laagst scorende attractie laat een effect van 2% toename in bezoekersaantallen in het eerste jaar zien, terwijl bij hetzelfde park een andere attractie circa 23% toename in het eerste jaar laat zien, gevolgd door nog eens zo'n 12% in jaar twee. Beide attracties werden door het management team van het park beschouwd als major investeringen, maar de verschillen in resultaat bedragen ongeveer factor 15. Ook de resultaten uit de andere onderzoeken geven het beeld te zien van grote verschillen in resultaten. Zo blijkt uit het onderzoek vanuit managementperspectief dat sommige parken een groei in bezoekersaantallen hadden van circa 20% in het eerste jaar, gevolgd door nog eens een substantiële groei in het tweede jaar, terwijl andere parken met hun laatste major investment nagenoeg nul procent extra bezoekers zeggen te hebben gerealiseerd. Uit het onderzoek naar thematisering komen eveneens grote verschillen naar voren; zowel tussen parken als binnen parken. Ik kom in paragraaf 8.3 terug op deze onmogelijkheid van het voorspellen van successen in de theme park industry.

Voorspelbaarheid verhogen via een omweg...

Hoewel het dus onmogelijk is om het effect van nieuwe attracties te voorspellen heeft het onderzoek wel een benaderingswijze neergelegd om het vraagstuk van investeren te benaderen. Dit is toegepast op de markt van attractieparken, maar dezelfde onderzoekswijze kan worden toegepast voor waterparken, musea, dierentuinen, binnensteden, culturele centra etcetera. Al deze partijen hebben immers te maken met dezelfde, of op zijn minst soortgelijke, investeringsvraagstukken. Het error correction model is een relatief eenvoudig model om de (korte en lange termijn) effecten van investeringen van het verleden vast te stellen. Deze effecten kunnen als een gemiddelde van het hele park berekend worden, maar ook per investering afzonderlijk worden bekeken, waardoor een goed inzicht ontstaat in de effectiviteit van de verschillende afzonderlijke investeringen. Door vervolgens aan de hand van de Attraction Response Matrix de afzonderlijke resultaten nauwkeuriger te bestuderen ontstaat inzicht in de achterliggende verklaring van de gevonden resultaten. De vraag is vervolgens welke onderzoeksmethodes hiervoor het meest geschikt zijn. Mahajan & Wind (1992) hebben een overzicht opgesteld van onderzoeksmethodes gekoppeld aan de new product development stages en constateren dat de meeste methodes falen in het verkrijgen van het gewenste inzicht. Zij pleiten daarom voor andere en betere marketing research methodes zoals real time marketing research. In dit proefschrift is enkele malen gebruik gemaakt van een vernieuwende en geschikte onderzoeksmethode om diepere inzichten te verwerven, de ZMET-methode (Zaltman, 2003). De indruk zou ontstaan kunnen zijn dat deze methode het antwoord is op alle onderzoeksuitdagingen. En hoewel ik zeer enthousiast ben over de enorme mogelijkheden van de methode om dieperliggende en onbewuste kennis boven water te krijgen, en inderdaad geneigd ben om deze methode voor elk verklaringsvraag te gebruiken, moet ik constateren dat de methode daarvoor in veel gevallen helaas te tijdrovend is. De doorlooptijd van een zorgvuldig uitgevoerd ZMET-onderzoek

bedraagt minimaal drie tot vier maanden. De methode is bovendien gepatenteerd en dus slechts bij beschikbaarheid van de getrainde onderzoekers uitvoerbaar. Daarom zal uiteindelijk via een gevarieerd en zorgvuldig afgestemd onderzoeksportfolio inzicht verkregen moeten worden in de onderlinge relaties tussen, en binnen, de cellen uit de Attraction Response Matrix. Alleen op die manier zullen we in staat zijn om de grote verschillen tussen succesvolle en minder succesvolle investeringen volledig te begrijpen.

Beperkte generaliseerbaarheid

Indien we op de bovenstaande wijze te werk gaan en vervolgens de situationele variabelen nauwkeurig worden vastgelegd en bestudeerd zijn we wellicht zelfs in staat om de gevonden resultaten in beperkte zin te generaliseren naar vergelijkbare situaties. Omdat werkelijk vernieuwende attracties geen basis voor generaliseerbaarheid hebben betekent dit automatisch dat deze redenering niet opgaat voor copy paste gedrag van dit soort attracties, maar enkel voor 'soortgelijke attracties in soortgelijke situaties'. Mogelijkerwijs is deze benaderingswijze daarom interessant voor organisaties die meerdere parken in hun portfolio hebben, zoals Merlin Entertainments Group, Compagnie des Alpes, Parques Reunidos en de Aspro Ocio Group. Deze ketens hebben enerzijds eenvoudiger toegang tot cases om kennis te generaliseren en kunnen anderzijds de aan de te generaliseren kennis verbonden voordelen in meerdere parken toepassen.

Modelleren met beperkingen

De keuze voor en toepassing van het error correction model als zodanig is niet het unieke en meest relevante van dit proefschrift. Het is immers een bestaand model en er zijn bovendien meerdere modellen denkbaar om de effecten van nieuwe attracties vast te stellen. Het is hooguit uniek omdat het de eerste keer is dat het model is toegepast in de context van attractieparken. De credits hiervoor gaan overigens niet naar mij maar naar Harald van Heerde die het mij enkele jaren geleden heeft geadviseerd vanwege de relatieve eenvoud van het model in combinatie met de mogelijkheid onderscheid te kunnen maken tussen korte en lange termijn effecten. Dat laatste was een van de wensen die ik aan een model stelde vanwege de vermeende korte termijn invloeden van vele variabelen, zoals weer, weekenddagen e.d. ten opzichte van vermoedelijke lange termijn effecten van de belangrijkste variabele uit het onderzoek, te weten de invloed van nieuwe attracties.

Met veel belangstelling heb ik het afgelopen jaar kennis genomen van het werk van Van Heerde en zijn collega's Van Oest en DeKimpe (2010) waarin een ander model werd gebruikt om het vraagstuk van investeringen binnen attractieparken te benaderen. Ergens ben ik wel een beetje jaloers op het raffinement dat hun model laat zien, en de mooie uitdoofpatronen die hun model wel kent en het mijne niet. Maar gelijktijdig geloof ik simpelweg niet in de aannames die achter het model zitten, zoals al te lezen viel in hoofdstuk vier van dit rapport. Het is desondanks frappant te constateren dat hun berekeningen voor de Efteling op een gemiddeld effect van 17% komen, waarvan 35% in het eerste jaar wordt gerealiseerd en 22% in het tweede jaar, en dat mijn berekeningen voor dit park op 6% in het eerste jaar uitkomen en nog eens 3,5% in het tweede jaar[6]. Dat wil namelijk zeggen dat de twee econometrische modellen voor de eerste twee jaren op nagenoeg dezelfde effecten uitkomen. Bij mijn model ontstaat er vervolgens de situatie dat er een nieuw evenwichtspunt wordt gevonden, dat in principe op het hoger bereikte niveau blijft liggen totdat er iets in het model verandert. Dat laatste is in principe per definitie zo, want in het volgend jaar zal de prijs anders zijn, de openingstijden, het weer etc.. Feitelijk komt het model dus met een kunstmatige oplossing en zou het inderdaad mooier zijn als er net zoals bij Van Oest et al. (2010) sprake zou zijn van uitdoofpatronen. De vraag blijft echter overeind of

[6] De wekelijkse bezoekersaantallen van de Efteling 1981-2005 zijn te vinden op http://wms-soros.mngt.waikato.ac.nz/NR/rdonlyres/ez6pn76yqnf4ihdhhg2fjsz4r3un7rro5hmelhydgi3ggnmgr3uu66bypfovu37f2m4uxrh7muw5we/MicrosoftWordThemeParkpaperfinalmanuscript.pdf

het nu zo is dat hun model effecten ziet die er eigenlijk niet zijn, of schiet mijn model inderdaad tekort in nuance en ziet het bepaalde effecten over het hoofd, die er eigenlijk wel zijn? Op dit moment weten we het volgens mij nog niet en het is ook vrij lastig om het met de data van de andere parken te achterhalen. Rutger van Oest is zo vriendelijk geweest om mij te introduceren in zijn model en heeft me daartoe zelfs zijn syntax aangeleverd. Het is me helaas niet gelukt om het op de andere parken toe te passen, omdat de datasets daarvoor niet geschikt bleken. Ook het experimenteren op de Efteling dataset, om daarmee de twijfels over de aannames achter het model te omzeilen, heeft me helaas niet het effect opgeleverd waarop ik hoopte. Het model was zeer instabiel zodra de aannames en variabelen te ver afweken van de oorspronkelijk gebruikte dataset van Van Oest et al. (2010).

Een blijvende speurtocht naar verbetering

Voor mijn ambitie om de theme park industry een tool te geven om de effecten van investeringen in kaart te brengen lijkt het model daarmee in elk geval niet het meest geschikte te zijn. Ondanks het raffinement van dit model en de beperkingen van het error correction model voldoet het laatste model toch beter aan de belangrijkste criteria voor modellering, te weten simplicity, robustness, flexibility and adaptibility (Paap & Franssen, 2000). Daarnaast zou het error correction model mijns inziens te prefereren zijn omdat het conversatiever is in de uitkomsten. Misschien dat er nog effecten zullen optreden na het tweede jaar, die mijn model niet detecteert, maar dat weten we in elk geval niet zeker. Het zou daarom de moeite waard zijn om nader onderzoek te blijven verrichten naar het meeste geschikte model om de effecten van nieuwe investeringen in attractieparken te achterhalen. Ik blijf van mening dat we ook daarmee geen voorspelling kunnen doen over de effectiviteit van een nieuwe attractie, maar wel dat we nauwkeuriger in kaart kunnen brengen wat het precieze effect van investeringen in het verleden zijn geweest; om vervolgens via bijvoorbeeld de Attraction Response Matrix een verklaring voor het gevonden effect te achterhalen. En dus de kans op een succesvolle investering in de toekomst te vergroten.

Enkele verklaringen voor het onvoorspelbare

In de hoofdstukken 6 en 7 heb ik twee methodes getoond waarmee verklaringen gevonden kunnen worden voor verschillen in de effectiviteit van attracties. Het artikel over co-branding laat zien dat het negatieve rendement van de PandaDroom te maken lijkt te hebben met het niet goed aansluiten van deze attractie bij de brand essence en brand assets van het park. Nieuwe attracties zouden de kans op een hoger rendement derhalve kunnen verhogen als deze een betere match met het merk zouden hebben. Een merk is een promise made and kept (Keller, 2003b) en als nieuwe attracties niet aan de brand promise voldoen dan staat daarmee de brand equity van het merk onder druk (Franzen & Van den Berg, 2002). In het geval van de PandaDroom bleek dat de gemiddelde waardering van de kernassociaties met betrekking tot de Efteling, een belangrijk onderdeel van de psychische brand equity, een afname te zien gaven (hoofdstuk 6). De negatieve ROI van de PandaDroom zoals gepubliceerd door Van Oest et al. (2010) zou dus zelfs nog sterker kunnen uitvallen dan door hun berekend, omdat de afname van de gemiddelde waardering van de kernassociaties ook een negatieve invloed lijkt te gaan hebben op toekomstige attracties. Dit effect van (mis)match met het merk geldt in elk geval voor de Efteling, als een theme park. In hoeverre het ook voor andere theme parks geldt, en zeker voor amusement parks, is onzeker. Mijn visie is dat andere parken het op dezelfde wijze zouden kunnen onderzoeken, en dan mogelijkerwijs, maar zeker niet noodzakelijkerwijs, tot dezelfde resultaten zullen komen. Overigens geloof ik dat de reden dat de Efteling het afgelopen decennium meerdere malen tot een van de sterkste merken van Nederland is uitgeroepen juist te maken heeft met de lessen die het

merk onder meer uit dit soort onderzoeken heeft geleerd. Hoewel een zekere nuance in merkdenken het park nog ten goede kan komen, denk ik dat de kracht en koers van het merk een van de succesfactoren van het Kaatsheuvelse bedrijf is.

Het artikel over theming kent een iets andere benadering. Het laat allereerst zien hoe theming gemeten kan worden, en vervolgens wat het effect van thematisering op bezoekersaantallen is. Het onderzoek maakt een onderscheid tussen 11 verschillende theming categorieën en de daaraan gerelateerde verwerkingsniveaus (hoofdstuk 7). Dit laatste is gebaseerd op het widely acknowledged and popular MAO-model (Batra & Ray, 1986). Het hierop gebaseerde model veronderstelt dat voor een succesvolle thematisering zowel motivation, abilty als opportunity bij de bezoeker aanwezig zal moeten zijn. De motivation wordt onder meer bepaald door de mate van thematisering en de match van thematisering. De belangrijkste uitkomst van dit onderzoek luidt dat meer thematisering in alle gevallen leidt tot hogere bezoekersaantallen. Er zijn bruikbare verschillen gevonden tussen amusement parks en theme parks aan de ene kant en grote en kleine parken aan de andere kant, maar het algemene beeld is duidelijk: hoe meer theming, hoe meer bezoekers. Ook geldt dat de aanwezigheid van motivation, ability en opportunity tot verhoogde effecten leidt. Of er sprake is van causaliteit is in dit onderzoek niet vastgesteld. Parkmanagers kunnen deze werkwijze ook toepassen met de mate van thrill, indoor- versus outdoor attracties etcetera. Als namelijk per attractie is vastgesteld wat het effect is geweest, kan ook per groep van attracties vastgesteld worden of er verschillen zijn. Ook met deze werkwijze wordt het inzicht in de effectiviteit van nieuwe attracties verhoogd. Zeker indien de uitkomsten niet als eindpunt van de analyse worden gezien, maar juist als beginpunt van een organisatiebrede discussie over het onderwerp.

De mening van mensen uit de branche

De afgelopen jaren heb ik het voorrecht gehad om met vele mensen uit de branche over dit onderwerp te spreken. Allereerst heb ik natuurlijk mogen spreken met de vele betrokkenen bij de deelnemende parken van het econometrische onderzoek, waaronder eigenaars, directieleden, general managers, verantwoordelijken voor research and development, human resource, marketing, operations en designers. Zonder uitzondering waren al deze mensen positief over het onderzoek en de resultaten. Gedeeltelijk zal dit veroorzaakt zijn door de wijze waarop het onderzoek is gepresenteerd. Een predictive validity van boven de 98% en in een enkel geval zelfs 99,9% spreekt snel tot de verbeelding en weerlegt eventuele kritische geluiden op basis van overtuigend klinkende bewijsvoering. Gedeeltelijk heeft er natuurlijk ook een selectie plaatsgevonden. Parken die niet in dit onderzoek geloven, hebben uiteraard niet deelgenomen en ook binnen de deelnemende parken zou dit effect aanwezig geweest kunnen zijn. Mocht je niet in het betreffende onderzoek geloven dan word je geen onderdeel van de task force die zich ermee bezig gaat houden. Desalniettemin hadden de reacties ook gematigd of zelfs negatief kunnen zijn. De reden dat dit niet het geval is heeft mijn inziens echter vooral met de toonzetting van het onderzoek te maken. Het onderzoek is in alle gevallen gepresenteerd als hulpmiddel om de onzekerheid rondom beslissingen te verminderen en niet als absolute uitkomst als zodanig. De resultaten zijn in het management team/ task force besproken en middels een zogenaamde wonder sessie verder verkend. Ik heb de parken eerst gedetailleerd inzicht gegeven in de wijze waarop het onderzoek heeft plaatsgevonden en heb de eventuele zwakke punten van het onderzoek toegelicht, zoals missing data, korte tijdreeksen, ontbrekende variabelen in het uiteindelijke model (vaak het marketingbudget, verdeling van het communicatiebudget, positie van concurrenten, prijsacties en tal van interactievariabelen), onnauwkeurigheid van diverse variabelen, outliers en andere zaken. Vervolgens heeft een discussie

plaatsgevonden over de uitkomsten voor het betreffende park. Eerst in algemene zin, dat wil zeggen dat is besproken wat nu het gemiddelde effect is geweest van alle investeringen die in de dataset zaten en wat we daarvan kunnen leren. Daarna vond een bespreking van de resultaten per attractie plaats en werden onderlinge inzichten uitgewisseld waarom bepaalde attracties zoveel (minder) succesvol waren dan andere. Deze discussies zijn door de deelnemende parken als zeer waardevol ervaren en hebben in alle gevallen tot interne vervolgsessies geleid.

Naast de bovenstaande gesprekken hebben ook gesprekken plaatsgevonden met vertegenwoordigers van parken die niet aan het econometrische onderzoek hebben deelgenomen, maar wel aan het managementonderzoek zoals gerapporteerd in hoofdstuk drie. Onder deze respondenten was een iets diffuser beeld te bespeuren. De meeste deelnemende parken waren eveneens enthousiast over het onderzoek en de gerapporteerde (on)mogelijkheden ervan. Er waren echter ook enkele uitzonderingen. Disneyland Resort Paris, bij monde van Roland Kleve, Alison Armor en Neil Corbett, geeft bijvoorbeeld aan dat het onderzoek zeer zeker de moeite waard is, dat de juiste vragen gesteld worden, maar dat de antwoorden helaas niet gevonden zullen worden. Disney is zelf namelijk al ruim 25 jaar bezig met het modelleren van dit soort effecten en neemt daarbij de meest onwaarschijnlijke variabelen op in haar model, zoals bijvoorbeeld de puke-factor bij thrill rides. Ondanks de jarenlange pogingen is het Disney tot dusverre blijkbaar nog niet gelukt om een voldoende aansprekend resultaat te realiseren. De reden hiervoor heb ik al eerder besproken en heeft mijns inziens te maken met de complexiteit en dynamiek van de organisatie. Een metafoor maakt dit wellicht nog duidelijker. Als een heel klein, licht muisje en een hele grote, zware olifant samen over een brug lopen en je wil de belasting van de muis op de brug vaststellen, dan moet je heel nauwkeurige meetinstrumenten hebben om dit te kunnen doen. Maar het kan wel. Loopt er echter niet één muisje, maar zes muisjes tegelijk over de brug en je wil van elk afzonderlijke muisje het individuele effect vaststellen, dan wordt het opeens toch wel heel lastig, zo niet onmogelijk om dit te meten. Bij Disney veranderen er zoveel variabelen gelijktijdig op een dag dat het overeenkomt met de meerdere muizen metafoor. Voor de meeste parken in Europa is de complexiteit en dynamiek echter aanzienlijk kleiner. Europa-Park is met ruim 4 miljoen bezoekers het op één na grootste park in Europa en waarschijnlijk samen met PortAventura in Spanje één van meest complexe en dynamische parken na Disneyland Resort Parijs. Ook bij dit park gelooft men in het belang van dit onderzoek, maar is van mening dat de statistische analyses het nooit zullen halen ten opzichte van het buikgevoel en de ondernemingsgeest van de organisatie. Er zijn simpelweg teveel factoren in het spel die uiteindelijk bepalend zijn voor een succesvolle bedrijfsvoering en deze zijn volgens het park nooit allemaal in het model te stoppen. Het bedrijf gelooft daarentegen wel zeer sterk in een systematische werkwijze waarbij goed geluisterd wordt naar de wensen en eisen van de gast om daarmee tot een beter dienstverlening te komen. Binnen dit bedrijf wordt echter vaak vanuit een sterke interne overtuiging gewerkt aan nieuwe ideeën, die vervolgens vanuit consumentenbeleving close gemonitord worden. Ook de uitkomsten van het onderzoek naar thematisering spreekt het park sterk aan. Onlogisch is dat niet, want Europa-Park scoort samen met de twee Disney parken het hoogst op micro theming van alle onderzochte parken. Liefde voor detail is bij Europa-Park in de hele marktbenadering terug te zien. Daarnaast heb ik gemerkt dat er parken zijn die wel geloven in de werkwijze van het modelleren en het achteraf verklaren, maar die net als Europa-Park vraagtekens stellen bij de mogelijkheden tot modelleren. Walibi World laat bijvoorbeeld weten dat een gouden formule zeer wenselijk zou zijn, maar dat deze formule gegeven de complexiteit en aantal betrokken factoren zeer onwaarschijnlijk zal zijn, en dat het dus uiteindelijk neer komt op gezond ondernemingsinstinct.

Meeting Harrison "Buzz" Price...

In oktober 2009 heb ik het privilege gehad om mijn onderzoek te mogen presenteren aan Bob Rogers (voormalig imagineering van Disney) en al ruim 25 jaar directeur/eigenaar van BRC consultancy, hét leidende imagineeringsbureau ter wereld. Een uur lang zei hij helemaal niets en keek hij me enkel strak aan met zijn donkere ogen en zware wenkbrauwen. Ik beschouwde deze presentatie als mijn finale praktijk crash test, en kreeg gaandeweg de presentatie de indruk dat mijn onderzoek niet bestand was voor dit soort zwaargewichten in de branche. Na een uur doorbrak Bob eindelijk het stilzwijgen met slechts enkele woorden: 'Wow, that's interesting. This is a great tool to take calculated risks. You should meet Harrison "Buzz" Price. I'll arrange a meeting for you.' And so he did. Een maand later sprak ik Harrison "Buzz" Price, het financiële en analytische genie achter, en persoonlijke vriend van Walt Disney, tijdens de IAAPA in Las Vegas. Deze man heeft Walt overtuigd zijn geld te investeren in de moerassen van Florida en heeft zich meer dan vijftig jaar lang de adviseur van het Disney concern mogen noemen. En ik zat daar op mijn gemak met hem te praten over mijn onderzoek. Zijn gezondheid was duidelijk niet meer optimaal, maar zijn humor en geestelijke gesteldheid hadden blijkbaar nog nauwelijks aan kracht ingeboet. In zijn boek 'Walt's revolution! By the numbers' bespreekt hij zijn inzichten en uiteindelijk de onmogelijkheden om de effecten van nieuwe investeringen in attractieparken te berekenen. De verklaarde variantie van zijn model kwam niet verder dan enkele procenten, want the data that he collected expressed an almost totally random relationship. Degree of investment resulted in a nearly random response on attendance, positive to negative. But random or not, according to "Buzz" Price each of these points has its own unique story to tell. En dat is precies wat hij geweldig vond aan mijn verhaal. 'Great, you're adding some new dots to my model. That's good, and you know 'the art is beating the average'. Neem gecalculeerde risico's, dat heeft Disney groot gemaakt.'

Toegankelijke kennisdeling

In 2010 heb ik presentaties gegeven aan de Nederlandse brancheverenigingen Club van Elf, Toerned, Recron en Koninklijke Horeca Nederland. Tevens heb ik toegankelijke artikels gepubliceerd in NRIT Magazine en Recreactie, om daarmee de conversatie met de branche op gang te helpen. Deze artikels en publicaties hebben inderdaad geleid tot spontane feedback en aanvragen om de methode en resultaten nader te komen toelichten. Het onderwerp blijkt een brede belangstelling te hebben (gekregen) in de branche en lijkt voor de geïnteresseerde parken de onzekerheid op het gebied van investeren enigszins te verkleinen, terwijl gelijktijdig de kans op succesvolle investeringen lijkt toe te nemen. In oktober en november 2010 heb ik als afsluiting van mijn onderzoek ook nog presentaties gegeven aan internationale vertegenwoordigers van de industrie. In oktober heb ik de resultaten en werkwijze tijdens de European Attraction Show in Rome gepresenteerd. Het betrof hier een groep van 30 deelnemers aan het institute for attraction managers programma van IAAPA Europe. De geografische herkomst van de deelnemers was met bijna 20 verschillende nationaliteiten zeer divers en dat maakte de feedback extra waardevol. De deelnemers vonden het academische gehalte van het onderzoek en de presentatie over het algemeen te hoog, maar leken er desondanks wel de praktische mogelijkheden van in te zien. De deelnemers uit de nieuwe en opkomende parklanden (waaronder Rusland, Letland en Polen) gaven te kennen het vraagstuk nog niet hoog op de agenda te hebben staan. Deelnemers uit de op parkgebied verdere ontwikkelde landen, zoals United Kingdom, Italie, Nederland en Frankrijk gaven daarentegen aan het als een van de topprioriteiten van hun bedrijf te beschouwen om meer inzicht te krijgen in de invloed van nieuwe attracties. Zij zouden graag meer inzichten verkrijgen over de (on)mogelijkheden van dit onderzoek. Een maand later heb ik een uitgebreidere presentatie gegeven tijdens de IAAPA expo in Orlando. Deze presentatie werd bezocht door ruim 100 geïnteresseerden van all over the world die bovendien diverse branches van onze industrie omvatten, zoals theme and

amusement parks, water parks, zoo's, aquaria, musea, science centers en de toeleverende industrie. In deze presentatie heb in een begrijpelijk stap voor stap benadering uitgelegd hoe de aanwezigen de onderzoeken zelf zouden kunnen uitvoeren. De audio tape hiervan is via de website van IAAPA op te vragen. De onmiddellijke, spontane reacties achteraf waren zeer positief (anders komt men waarschijnlijk ook niet even een spontaan praatje maken) en ook de schriftelijk evaluatie gaf te kennen dat aanwezigen het een zeer interessante en informatieve presentatie vonden. Ik heb in de week na de IAAPA expo van circa 10 aanwezigen emails gekregen met aanvullende vragen en ben naar aanleiding van de presentatie met nog eens 20 andere geïnteresseerden gelinkt via Linkedin. Hoewel mijn presentatie mijns inziens toch onmiskenbaar heeft benadrukt dat het voorspellen van het onvoorspelbare niet mogelijk is, is het opvallend te constateren dat vele reacties hier toch naar neigen. Het zou erop kunnen duiden dat voor veel parken innovaties een incremental in plaats van step wise karakter (mogen) hebben en dat voor hen geldt "it's better to be vaguely right, than precisely wrong". Ik kom hier zo meteen in de afsluitende paragraaf op terug.

De laatste opmerkingen

Als ik al met al de balans opmaak, dan constateer ik dat mijn oorspronkelijke argeloosheid en simpele positivistische wetenschapsopvatting gaandeweg al vrij snel veranderd was in een meer kritisch realistische opvatting, maar dat de wens nog lange tijd de vader van mijn gedachtes is gebleven. Al in het eerste half jaar van mijn proefschrift bekroop mij de twijfel van het kunnen modelleren en voorspellen van zaken als creativiteit en (stepwise) innovations. Binnen het eerste jaar was deze twijfel al omgeslagen in de overtuiging dat dit inderdaad niet mogelijk was. De eerste resultaten van mijn eigen onderzoek gaven al een dermate diffuus beeld te zien dat ik niets anders kon dan constateren dat de door mij zo vurig gewenste "gouden Cornelis regel met betrekking tot pretparkinvesteringen" een utopie zou blijken. Mijn onderzoek heeft zich daarom in de volgende periode doorontwikkeld naar het vinden van een alternatief om toch aan de oorspronkelijke doelstelling van het kunnen verhogen van de accountability van investeringen in attracties te kunnen voldoen. In mijn speurtocht naar een alternatief voor voorspelbaarheid heb ik de Attraction Response Matrix ontwikkeld en die omweg heb ik uiteindelijk doorgezet in twee zogenaamde verklaringshoofdstukken. Zou ik echter vanaf het begin de zekerheid van de onmogelijkheid van het voorspellen van het onvoorspelbare ervaren hebben, dan was deze Attraction Response Matrix er waarschijnlijk nooit gekomen, maar had mijn onderzoek zich meer gericht op de procesmatige kant van investeren, creativiteit en innovatie, en op de strategieën die organisaties gebruiken om met de spanning tussen creativiteit en voorspelbaarheid om te gaan.

Het komt wellicht als mosterd na de maaltijd om in deze laatste paragraaf nog uitgebreid over deze zaken uit te wijden maar gelijktijdig zou het een gemiste kans zijn om er op zijn minst niet alsnog een paar woorden aan te besteden.

Strategieën tot risicospreiding en -beperking

Hesmondhalgh (2007) beschrijft in zijn boek negen onderscheidende karakteristieken of the cultural industries, die bepalend zijn voor de wijze waarop organisaties uit deze industrie hun bedrijfsvoering inrichten. Ik ben van mening dat vier hierin beschreven strategieën herkenbaar zijn in de markt van theme parks:

- Formatting: stars, genres and serials
- Loose control of symbol creators, but tight control of distribution and marketing
- Concentration, integration and co-opting publicity
- Misses are offset against hits by building a repertoire

In hoofdstuk twee heb ik het onderscheid gemaakt tussen theme parks in de brede definitie en theme parks in de meer beperkte definitie, waarbij ik aangaf dat het onderscheid tussen theme parks en movie parks enerzijds en amusement parks en Europen pleasure gardens anderzijds a matter of degree is, a question of balance between a parks´ functional and communicative aspects. Amusement parks and pleasure gardens signify as well and are also open for interpretation, but the primary aim of amusement parks and pleasure gardens is not meaning, but amusement and pleasure, whereas for theme parks and movie parks the primary aim is the production of meaning. Dit onderscheid betekent dat de bovenstaande strategieën van Hesmondhalgh (2007) vooral opgaan voor theme parks (in de beperkte zin). Het zijn met name deze parken die te maken hebben met het belang van creativiteit die benodigd is voor de production of meaning en daarom de bovenstaande vermelde strategieën hanteren om de risico's te beperken. Zij creëren content die uiteindelijk via de symbolische wereld gestalte krijgt in de vorm van attracties, shows, horeca en retail outlets in het park; en dat is een risky business. De resultaten van mijn onderzoek laten echter ook grote verschillen in effectiviteit van nieuwe attracties bij amusement parken zien. Ook deze parken zullen er daarom mijns inziens baat bij hebben om gebruik te maken van de strategieën van formatting en repertoire building, zoals bijvoorbeeld de in hoofdstuk 7 gepresenteerde resultaten met betrekking tot theming duidelijk maken.

Inspirerend leiderschap

De literatuur is redelijk eensgezind als het gaat om wat de belangrijkste succesfactoren zijn voor innovatie. Het creëren van de juiste organisatiecultuur is veruit het meest belangrijke wat een organisatie kan doen om de kans op succesvolle innovaties te verhogen, en om dat te bereiken is sterk leiderschap vereist (Goffee & Jones, 1998; Hargadon & Sutton, 2000; Kuczmarski, 1996). Allereerst zal dat leiderschap zich op topniveau binnen de organisatie moeten manifesteren, maar daarnaast ook op alle andere betrokken niveaus van de organisatie. Het gaat hierbij om motiverend leiderschap dat inspireert to go the extra mile, iets wat vaak nodig is in innovatieprojecten (Goffee & Jones, 1998). Maar omdat innovatie niet alleen uit creativiteit bestaat, maar ook uit implementatie is tevens sterk management vereist dat mensen kan aansturen, processen en structuren kan bewaken en tot een efficiënte uitvoering in staat is. Ik heb de indruk dat in de meeste organisaties aan dit laatste niet echt een gebrek is, zie hiervoor ook mijn opmerking over McDonaldization in paragraaf 2.4, maar dat de uitdaging zit in het creëren en faciliteren van een cultuur die gebaseerd is op vertrouwen, lef en risico nemen. Goede managers zijn lang niet altijd inspirerende leiders.

Inspirerende leiders tolereren risico en staan open voor step wise changes in plaats incremental ones. De juiste cultuur die door deze leiders wordt gecreëerd is er daarom vooral een van experimenteren en het daarmee accepteren van fouten maken. Het maken van fouten wordt gezien als een versneld

leerproces en daarom moedigen zij hiertoe aan. Zij maken vaker gebruik van emergent strategieën in plaats van planned ones (Hatch, 1997). Dit betekent dat zij top down planning combineren with structures that allow for reactions to insights and activities from all levels of the organization. Zij werken daarmee vanuit een duidelijke visie en missie en zijn daaraan ook zeer sterk gecommiteerd (Geurssen, 1996). De benadering is fluid, focused, flexible en gebaseerd op conditional go decisions (Cooper, 1994; Geurssen, 1996), en het werk moet voor hun vooral ook fun zijn. Belangrijk nevenvoordeel hiervan is namelijk dat het de acceptatie van failures vergroot en daarmee aanzet tot de zo noodzakelijk drang tot experimenteren. Daarnaast stappen deze leiders over de mogelijke bezwaren van collaboration heen. Zij weten dat het vertrouwen vergt om zowel intern als extern de samenwerking op te zoeken. Vaak blijkt de samenwerking een eenzijdig proces te zijn, waarbij van volledige reciprociteit geen sprake is, maar desondanks durven de inspirerende leiders het telkens weer aan om deze samenwerking op te blijven zoeken. Ze bieden een tweede kans daar waar ze geloven dat het voor beide partijen uiteindelijk beter is om samen verder te gaan (Hargadon & Sutton, 2000).

Knowledge creating organisation

Het laatste aspect dat ik hier nog wil noemen is het belang van een knowledge creating organisatie. In onze branche hebben we waarschijnlijk meer dan in andere branches te maken met carrierepatronen die het mogelijk maken om van frietverkoper tot directeur door te groeien. Als je maar lang genoeg in de organisatie meedraait, kun je het uiteindelijk zonder (initiële) opleiding toch heel ver schoppen. Er zijn voorbeelden te over van managers die ooit als vakantie- of oproepkracht zijn begonnen en gaandeweg een weg naar de top van de organisatie hebben gerealiseerd. Het vraagt om doorzettingsvermogen en een sterke toewijding aan de organisatie, maar elke staff member werkzaam op entry level kan uiteindelijk een mooie carrière in de branche realiseren. Dit betekent dat het belangrijk is om het managen van tacit knowledge (kennis die gekoppeld is aan de persoon die deze heeft) te onderkennen. In de loop der jaren verzamelt deze persoon een enorme hoeveelheid waardevolle kennis, die persoonlijk is en daarmee ook lastig te articulen en te managen (Nonaka & Takeuchi (1995). Een knowledge creating company has the ability to tap into this tacit knowledge. Ook voor creativiteit is een body of knowledge nodig, want creativity is relating a concept to a particular body of knowledge. The existing body of knowledge is as vital as the novel idea. Een mogelijk nadeel is dat deze kennis beperkingen kan opleggen aan de rest van de organisatie (Quintas, Lefrere & Jones, 1997) en dus is het belangrijk te weten waar deze kennis de organisatie verlamt en waar deze tot een verdere bloei van de organisatie ingezet kan worden. Leiders zullen zonder aanziens des persoons moeten bepalen waar tacit knowledge bruikbaar is en waar deze juist een rem op de organisatie zet.

Beat the average and take calculated risks

Ik zou nog aandacht kunnen besteden aan de vijf generaties van New Product Development en daarmee de wegen naar uiteindelijke systems integrating and networking models kunnen beschrijven (Rothwel, 1992) of een betoog over fuzzy front end benaderingen kunnen uitwerken (Khuran & Rosenthal 1997), de rijke ideeen van Hesmondhalgh (2007) kunnen bespreken, alle boeken over Disney imagineering kunnen samenvatten of een betoog over de al dan niet benodigde constraints voor creatieven kunnen uiteenzetten (Geurssen, 1992, 1996). Het zou stuk voor stuk interessant zijn, maar ik denk dat ik mijn punt inmiddels wel gemaakt heb. Het is lastig om het succes van investeringen in onze branche te voorspellen, maar er is evenmin sprake van een volledig random uitkomst. We must and can beat the average; als we beschikken over good people at all levels, die bereid zijn om kennis te delen, gecalculeerde risico's te nemen en vertrouwen te hebben en te geven; in elkaar en in het proces.

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